New York State Museum Bulletin

Published by The University of the State of New York

No. 266 ALBANY, N. Y. JUNE 1925

New York State Museum

JOHN M. CLARKE, Director

HOMER D. HOUSE *State Botanist*

REPORT OF THE STATE BOTANIST FOR 1924

	PAGE
Introduction	5
Local Flora Notes IX	11
Vegetation of the Eastern End of Oneida Lake (Supplementary account)	28
Notes on Fungi IX	41
New or Noteworthy Species of Fungi IV. JOHN DEARNESS and HOMER D. HOUSE	57
A Convenient Laboratory Plant Press. H. S. JACKSON	99
The Rare Plants of Bergen Swamp. MILTON S. BAXTER and HOMER D. HOUSE	103
General notes	107
Index	111

ALBANY
THE UNIVERSITY OF THE STATE OF NEW YORK
1925

M205r-F25-1700 (7-4713)

THE UNIVERSITY OF THE STATE OF NEW YORK

Regents of the University
With years when terms expire

1934 CHESTER S. LORD M.A., LL.D., *Chancellor* - - Brooklyn
1936 ADELBERT MOOT LL.D., *Vice Chancellor* - - - Buffalo
1927 ALBERT VANDER VEER M.D., M.A., Ph.D., LL.D. Albany
1937 CHARLES B. ALEXANDER M.A., LL.B., LL.D., Litt.D. - - - - - - - - - - - - - Tuxedo
1928 WALTER GUEST KELLOGG B.A., LL.D. - - - Ogdensburg
1932 JAMES BYRNE B.A., LL.B., LL.D. - - - - - New York
1931 THOMAS J. MANGAN M.A. - - - - - - - - Binghamton
1933 WILLIAM J. WALLIN M.A. - - - - - - - Yonkers
1935 WILLIAM BONDY M.A., LL.B., Ph.D., D.C.L. - New York
1930 WILLIAM P. BAKER B.L., Litt.D. - - - - - Syracuse
1926 ROLAND B. WOODWARD, B.A. - - - - - - - Rochester
1929 ROBERT W. HIGBIE, M.A. - - - - - - - - Jamaica

President of the University and Commissioner of Education
FRANK P. GRAVES Ph.D., Litt.D., L.H.D., LL.D.

Deputy Commissioner and Counsel
FRANK B. GILBERT B.A., LL.D.

Assistant Commissioner and Director of Professional Education
AUGUSTUS S. DOWNING M.A., Pd.D., L.H.D., LL.D.

Assistant Commissioner for Secondary Education
JAMES SULLIVAN M.A., Ph.D.

Assistant Commissioner for Elementary Education
GEORGE M. WILEY M.A., Pd.D., LL.D.

Director of State Library
JAMES I. WYER M.L.S., Pd.D.

Director of Science and State Museum
JOHN M. CLARKE Ph.D., D.Sc., LL.D.

Directors of Divisions
Administration, LLOYD L. CHENEY B.A.
Archives and History, ALEXANDER C. FLICK M.A., Litt.D., Ph D.
Attendance, JAMES D. SULLIVAN
Examinations and Inspections, AVERY W. SKINNER B.A., Pd.D.
Finance, CLARK W. HALLIDAY
Law, IRWIN ESMOND Ph.B., LL.B.
Library Extension, WILLIAM R. WATSON B.S.
School Buildings and Grounds, FRANK H. WOOD M.A.
Visual Instruction, ALFRED W. ABRAMS Ph.B.
Vocational and Extension Education, LEWIS A. WILSON

New York State Museum Bulletin

Published by The University of the State of New York

No. 266 ALBANY, N. Y. June 1925

New York State Museum

JOHN M. CLARKE, Director

HOMER D. HOUSE, State Botanist

REPORT OF THE STATE BOTANIST FOR 1924

Scientific investigations. The investigative work of the State Botanist during 1924, and since the last published report of this office, has been directed chiefly toward the completion of the Annotated List of the Ferns and Flowering Plants of New York State, which was published as Museum Bulletin 254. This has involved much bibliographic work as well as study of the plants in the state herbarium. Collections and field studies have been carried on during the past year in the vicinity of Newcomb, Essex county; the east shore of Lake Ontario, in Jefferson and Oswego counties; and the vicinity of Oneida lake in the central part of the State. Collections of plants from these and other localities, which are of scientific interest have been incorporated into the herbarium. The ferns and flowering plants of peculiar interest are reported upon under Local Flora Notes, and the fungi under Notes on Fungi. A large number of fungi, both parasitic and saprophytic, chiefly of recent collection, have been studied in collaboration with Dr John Dearness, and reported upon under the heading New or Noteworthy Species of Fungi.

Doctor Peck's field notes. Investigators in mycology who have had occasion to refer to Doctor Peck's types or other collections of fungi in the state herbarium have often commented upon the fact that his published descriptions and reports of species already published do not give the year of collection. This is explained in large part by the fact that the species described or reported upon were collected during the year for which the publication is the annual report. Very rarely does he report upon any collection except of the current year, the various monographs, of course, excepted. These monographs were very largely, if not wholly, a compilation

of his formerly published and reported species without much reference to the considerable mass of undetermined material of those groups which was stored away in bundles. This is well illustrated by Kauffman's critical study of Doctor Peck's material of the genus Inocybe[1].

In his notebooks Doctor Peck described under tentative names a very large number of fungi which his critical judgment did not permit him to publish for one reason or another. Without doubt many of these are valid as well as unpublished species, as indicated by Murrill[2] in the case of Stropharia campestris Peck, and Stropharia rugoso-annulata Farlow; Peck. Since the notes were made almost without exception from fresh material they possess a considerable value to the later students of those groups represented. In addition, his notes upon many well-known as well as little known species, made from fresh material and never published, may undoubtedly be of assistance to other investigators.

In order that these voluminous notes, occupying some thirty large notebooks, might be available for reference, there has been prepared an index, which has been typed with two carbon copies. One of the copies has been placed in the office of pathological collections at Washington, and the other in the mycological laboratory of the New York Botanical Garden. From the original index Dr Howard A. Kelly of Baltimore, whose interest in mycological research is well known, has had six additional copies prepared which were distributed as follows: one to Harvard University, one to the Missouri Botanical Garden, one to the University of Michigan, one to Cornell University, one for his personal library, and one to Professor Beardslee.

Investigators working at Albany may have reference to these notes through the index. Those working at a distance and consulting the copies at the institutions mentioned, may secure upon application a transcript of such items as are desired. Unless the material to which the notes refer is quite ample, however, it is a rule of the New York State Museum not to lend material, especially type specimens.

Doctor Peck's notebooks covering a period from 1868 to 1913, have been numbered as follows:

---

[1] New York State Mus. Bul. 233–34: 43–60. 1921.
[2] Mycologia 14: 136, 139. 1922.

1 1868–71
2 1869–70
3 1870
4 1871–73
5 1873–74
6 1874–76
7 1876–77
8 1878
9 1877–78
10 1879
11 1879–80
12 1881–83
13 1884
14 1885–86
15 1886–87
16 1888–89
17 1890–92
18 1892–95
19 1895–96
20 1896
21 1897–98
22 1899–1900
23 Copy of Massee's Monograph of Coprinus, and report of extralimital species of fungi
24 Extralimital new species, etc.
25 Extralimital fungi
26 1901
27 1901–02
28 1903–05
29 1906–08
30 1909–10
31 1911–12
32 1912–13

In addition to the above notebooks, there is a notebook containing 100 pages of descriptive matter and colored sketches of agrics, of his very earliest collection, apparently before he became State Botanist, mostly unnamed and impossible to index. Seven notebooks in addition to the above are devoted to Crataegus, two to contributions and one to identifications made for correspondents.

The typed index to the thirty-two notebooks enumerated above occupies 130 pages, and is subdivided into:

Personal mention
New York localities
Flowering plants and ferns
Mosses, liverworts, lichens and algae
Fungi

The last is naturally the important part of the index and occupies pages 25 to 130 of the manuscript.

Contributions to the state herbarium. The additions to the state herbarium since the last published report from this office in the form of contributions and exchanges are presented in the following list of contributors, which also indicates the number of specimens received from each:

Roy Latham, Orient	522
I. W. Clokey, Denver, Colo. (exchange)	254
E. Bartholomew, Stockton, Kan. (exchange)	210
Dr P. O. Schallert, Winston-Salem, N. C. (exchange)	116
J. B. Norton, Hartsville, S. C. (exchange)	152
British Museum, London, England (exchange)	100
Dr Harold St John, Pullman, Wash. (exchange)	100
Leland S. Slater, Coxsackie	60
Mr and Mrs E. A. Eames, Buffalo	56
C. A. Brown, Albany	50
Douglas M. White, Rochester	43
M. S. Baxter, Rochester	45
Dr J. J. Davis, Madison, Wis	53

F. A. Ward, Cortland	35
E. P. Killip, Washington, D. C.	30
Miss E. M. Slater, El Paso, Texas	27
Dr G. R. Bisky, Winnipeg, Canada	21
U. S. Dep't of Agriculture, Washington, D. C.	15
William C. Ferguson, Hempstead	15
Miss C. C. Haynes, Highlands, N. J.	13
W. C. Muenscher, Ithaca	11
S. H. Burnham, Ithaca	9
Rev. H. M. Denslow, New York	7
Rev. G. H. French, Albany	5
Dr C. E. Fairman, Lyndonville	5
Dr John Dearness, London, Ont., Canada	5
Miss Helen LaForce, Ballston Lake	4
Mrs C. E. Christian, Canandaigua	3
F. H. Benedict, Watermill, Long Island	3
Annabel Martin, Broadalbin	3
Dr W. H. Beauchamp, Syracuse	2
George E. Andrus, Middletown	2
Mrs O. P. Phelps, Saratoga Springs	2
One each from: Charles Gilbert, Honeoye; Dr William Mansfield, Albany; Frank Dobbin, Shushan; W. T. Shoemaker, Elmira; Dr W. J. Nellis, Albany; Mrs L. F. Jolley, Berkshire, Vt.; Dr J. R. Weir, Washington, D. C.; Neil Hotchkiss, Syracuse; E. J. Stein, Albany; Mrs Charles Beach, Beachview; C. T. Walton, Port Henry; Dr M. D. Leonard, Albany; Mrs H. H. Fairbanks, Bainbridge; F. W. Pugsley, Pittsford; P. D. Phair, Presque Isle, Me.; R. G. Pierce, Washington, D. C.; Dr D. R. Sumstine, Pittsburg, Pa; Miss S. M. Williamson, St Petersburg, Fla.; W. T. Jervis, New York; F. C. Stewart, Geneva; and Dr J. B. Todd, Syracuse	21
Total	1 999

Of these specimens, 853 were received during the season of 1924; 413 during the season of 1923, and 733 during the season of 1922.

Additions to the herbarium. The total number of specimens which have been added to the collections from all sources during the year 1924 is 1355, of which 510 were received by contribution or exchange, and 845 by collections made by the State Botanist. During 1923 the number of specimens added to the collections was 1108, and during 1922 the number was 1243. These figures do not include a large number of specimens collected by the Botanist for purposes of scientific exchange, nor do they include such specimens received as contributions or in exchange which have not, for one reason or another, been mounted or prepared for the herbarium. In connection with the curatorial work made in connection with the collections, the services of recent temporary assistants, Helen LaForce and C. A. Brown, have been most satisfactory and indispensable. The bulk of routine and curatorial work in the State Botanist's office is so great that permanent assistance is needed in order to carry forward any extensive work in botanical research.

The collections by the State Botanist, noted above, were made in the following counties of the State:

Albany	Madison	Warren
Bronx	Nassau	Ulster
Essex	Oneida	Saratoga
Fulton	Onondaga	Schenectady
Greene	Oswego	Montgomery
Hamilton	Rensselaer	Herkimer
Jefferson	Rockland	
Lewis	Suffolk	

Identifications. The State Botanist's office has been called upon to identify 425 specimens of plants including many edible and poisonous mushrooms during 1924. These identifications were requested by 130 persons, mostly by mail, some of them, however, by personal visit to the office. The demand for this service varies considerably from year to year. During 1923 the determinations numbered 450 for 132 persons, while during 1922 the determinations numbered 753 for 194 persons.

Visitors. The extensive collection of the state herbarium, including as it does a very large number of type specimens of fungi, is frequently consulted by specialists in various lines of research. Such facilities as the herbarium room affords is always placed at their disposal and personal attention is given to facilitate their work.

Lectures. During 1924 the State Botanist has delivered eight lectures before various organizations upon the subject of plant life, wild flowers and wild flowers needing protection.

Myxomycetes of the Cayuga lake basin. By purchase a set of Myxomycetes collected in the Cayuga lake basin by F. B. Wann and W. C. Muenscher has been secured for the herbarium. The collectors have already published an account of their collections (Mycologia 14: 38–41. 1922), so that the list of species represented, fifty in number, need not be repeated here.

Plants from Bonaventure, Quebec. During the latter part of July 1923, Mr and Mrs Edward A. Eames of Buffalo collected a number of plants on this portion of the Gaspe peninsula which were later contributed to the State Museum. Among the localities represented are Bic, St Anne des Montes, Port Daniel, Perce and Bonaventure island. Following is a list of the species received:

Antennaria dioica Greene
Anticlea elegans (Pursh) Rydb.
Asplenium viride Huds.
Cakile edentula Bigel.
Carex angustior Mackenzie
Carex atratiformis Britton

Carex Crawfordii Fernald
Carex disperma Dewey
Carex stipata Muhl.
Campanula rotundifolia L.
Cerastium arvense L.
Dryopteris Filix-mas (L.) Schott
Elymus arenarius L.
Erigeron hyssopifolium Michx.
Eriophorum Chamissonis C. A. Mey.
Eriophorum viridicarinatum (Engelm.) Fernald
Glaux maritima L.
Halenia deflexa (J. E. Sm.) Griseb.
Juncus alpinus Vill.
Juncus bufonius L.
Lepargyraea canadensis (L.) Greene
Lepidium campestre L.
Lepidium sativum L.
Malaxis monophylla (L.) Sw.
Pinguicula vulgaris L.
Polygonum viviparum L.
Polystichum Lonchitis (L.) Roth
Potentilla pectinata Raf.
Saxifraga Aizoon Jacq.
Scirpus microcarpus Presl.
Spergula arvensis L.
Saxifraga aizoides L.
Ranunculus Cymbalaria var. alpinus Hook.
Triglochin palustris L.
Triglochin maritima L.
Trisetum spicatum (L.) Richter

LOCAL FLORA NOTES IX

Since the publication of Local Flora Notes VIII,[1] there has been published by the writer an Annotated List of the Ferns and Flowering Plants of New York State.[2] With this as a basis it will be the purpose of this and future Local Flora Notes to make additions to the known species and varieties of plants of the State, to make certain corrections and other additions as might seem to come within the scope of this title.

Albany county

A series of articles in the Albany Zodiac in 1835 and 1836 by Dr James Eights brings to mind most forcibly the great changes which have taken place in the flora of the sand plains between Albany and Schenectady and especially the disappearance of many attractive wild flowers and ferns, which to judge from his remarks were then quite common. He speaks of finding in blossom such plants as:

Linnaea borealis (probably long since disappeared from the woods of these sand plains. Doctor Peck seems not to have found it there in his day).

Plantanthera orbiculata (Lysias orbiculata (Pursh) Rydb.)

Plantanthera dilatata (Limnorchis dilatata (Pursh) Rydb.)

Habenaria fimbriata (probably our Blephariglottis psycodes (L.) Rydb., now exceedingly rare here).

Habenaria ciliaris (Blephariglottis ciliaris (L.) Rydb., known to Beck, Pearson and others, and was last collected here by Doctor Peck about 1908, since which time no trace of it has been found.)

Pterospora andromeda (Eights gives to this plant the common name of Albany beechdrops, because, as he states, it was first found near Albany by Dr Edwin James. There are no recent records for it in this vicinity.)

Cassia marilandica L.

Hypericum ascyroides (now called H. Ascyron L., and not recently collected here).

Pedicularis pallida Pursh (now called P. lanceolata Michx., and unknown in the sand plains, still persisting in a small patch north of Rensselaer).

Eights also lists as common flowering plants of the sand plains Lobelia cardinalis, Parnassia caroliniana,

[1] New York State Mus. Bul. 243–44: 13–58. 1923.
[2] New York State Mus. Bul. 254. 1924.

Schwalbea americana, Gerardia glauca of Eddy, Gentiana crinita, and Viola pedata. Of these only Viola pedata and Gentiana crinita are still found. Doctor Eights speaks of the abundance of the Trailing Arbutus, Epigaea repens L., but at the present time there are but a few scanty and widely separated patches of it left.

Ranunculus flabellaris Raf.

In a small pond near Wemple, *H. D. House 10004*, May 22, 1924.

Amelanchier amabilis Wiegand

Dry woods near Lawson's lake, Helderberg mountains, *H. D. House 10006*, June 1, 1924.

Carex aurea Nutt.

Wet soil near Guilderland Center, *H. D. House 10436*, August 3, 1924.

Rosa Lyoni Pursh

Dry thickets, Voorheesville, *House 10607*, August 28, 1924. Glenmont, *House 6573*, 1919. The specimens from which was made the colored illustration of Rosa virginiana, in the Wild Flowers of New York, has been determined by both Doctor Rydberg and Mrs Erlanson as Rosa Lyoni.

Rosa obovata Raf.

Thickets, Guilderland Center, *House 10788*, October 2, 1924.

Rosa subblanda Rydberg

Thompson's lake, *Peck*. Also collected at Cooperstown Junction and at Elizabethtown by *Peck*.

Rosa serrulata Raf.

Dry, sandy woods near Karner, *H. D. House 6367*, June 26, 1919. Glenmont, *House 10342*, July 15, 1924.

Thalictrum dasycarpum Fisch. & Mey.

Dry woods, Green Island, *H. D. House 10373*, July 22, 1924.

Fraxinus Michauxii Britton

River banks, Green Island, *H. D. House 10368*, July 22, 1924; Guilderland Center, *No. 10628*, September 7, 1924.

Doellingeria infirma (Mich.) Greene

Dry woods, Green Island, *H. D. House 10365*, July 22, 1924.

Azalea viscosa L.

Marsh near Voorheesville, *H. D. House 10608*, August 28, 1924. The chief vegetation in this marsh consists of great thickets of blueberry bushes, three distinct forms being easily recognizable; Vaccinium corymbosum, V. corymbosum var. pallidum, and V. atrococcum. Among other species worthy of note here are Anchistea virginica (L.) Presl., Vaccinium Oxycoccus L., Rynchospora alba, Larix laricina and Eriophorum virginicum.

Heliopsis scabra Dunal.

Shore of Watervliet reservoir, Guilderland Center, *H. D. House 10603*. Here also was found on August 28, 1924, Polygonum Muhlenbergii S. Wats., and Eragrostis hypnoides (Lam.) B. S. P.

Solidago ulmifolia Muhl.

Thickets near Glenmont, *H. D. House 10647*, September 11, 1924.

Cortland county

Corylus cornuta Marsh.

Dean's pond near Marathon, *F. A. Ward*, July 26, 1924. Here also grows Pontederia cordata L., both being rather rare in this region. Mr Ward also sends the following plants in addition to the above two mentioned:

Panicularia grandis (S. Wats.) Nash, near Cortland
Scirpus atrovirens Muhl., near Cortland
Veronica scutellata Schw., near Cortland
Calamagrostis canadensis L., near Preble
Agropyron repens (L.) Beauv., near Preble
Bromus tectorum L., near Preble
Blephariglottis psycodes (L.) Rydb., near Preble
Linum usitatissimum L., near Preble
Linaria minus (L.) Desf., near Preble
Campanula aparinoides Pursh, near Preble
Andromeda glaucophylla Link, near Little York
Potentilla fruticosa L., near Little York
Cathea tuberosa (L.) House, near Little York
Vaccinium Oxycoccus L., near Little York
Pogonia ophioglossoides (L.) Ker., near Little York

Dutchess county

Ajuga repens L.

Millbrook, *Helen M. Fort*, June 2, 1924.

Essex county

The following list of lichens represent the recent collections in the vicinity of Newcomb, and the determinations of them by G. K. Merrill:

Tryletelium virens Tuckerm.
Conotrema urceolatum (Ach.) Tuckerm.
Graphis scripta (L.) Ach.
Baeomyces roseus Pers.
Cladonia cristatella Tuckerm.
incrassata Merrill
deformis extensa (Hoffm.) Wain.
fimbriata simplex (Weis.) Flk.
gracilis dilatata (Hoffm.) Wain.
multiformia Merrill
ochrochlora ceratodes Flk.
pyxidata (L.) Hoffm.
choraphana (Spreng.) Flk.
neglecta (Flk.) Mass.
rangiferina (L.) Web.
squamosa (Scop.) Hoffm.
sylvatica (L.) Hoffm.
Stereocaulon pascale (L.) Fr.
Gyrophora Dillenii (Tuckerm.) Mull.
Sticta amplissima (Scop.) Mass.
pulmonaria (L.) Ach.
Nephroma helveticum Ach.
Peltigera aphthosa (L.) Hoffm.
canina membranacea Ach.
Pertusaria leioplaca (Ach.) Schaer.
. multipuncta (Turn.) Nyl.
Lecanora allophana Ach.
pallida (Schaer.) Rabenh.
subfusca (L.) Ach.
parisiensis Nyl.
varia (Ehrh.) Ach.
Nephromopsis ciliaris (Ach.) Hue
Cetraria lacunosa Ach.
pinastri Fr.
saepinicola (Ehrh.) Ach.
Parmelia conspersa (Ehrh.) Ach.
olivacea Ach.
physodes (L.) Ach.
saxatilis (L.) Ach.
sulcata Tayl.
subaurifera Nyl.
tiliacea Ach.
Everina furfuracea (L.) Mann.
Ramalina calicaris (L.) Fr.
subfastigiata Nyl.
Usnea barbata (L.) Fr.
longissima Ach.
Buellia disciformis (Fr.) Mudd.
penobscotensis Merrill
Physcia obscura virella (Ach.) Leight.
stellaris (L.) Nyl.

Frullania Selwyniana Pearson

On the bark of standing arbor vitae (Thuja occidentalis L.), Newcomb, *H. D. House,* June 6, 1922. Of frequent occurrence

in this section but only on the trunks of arbor vitae. Determined by Dr A. W. Evans, who states that he has no previous record of this hepatic from New York, although he has it from Vermont and Ohio. Barbour[1] records it only from Ohio and Canada.

Among other hepatics collected at Newcomb, and named by Doctor Evans, are:

Frullania eboracensis Gottsche
Frullania Asagrayana Mont.
Bazzania trilobata (L.) S. F. Gray
Porella platyphylla (L.) Lindb.
Ptilidium pulcherrinum (Web.) Hampe

Cypripedium arietinum R. Br.

Near Keeseville. *W. H. Roberts,* June 1, 1924.

Rosa Bushii Rydberg[2]

Old fields near Newcomb. *H. D. House 9079,* July 18, 1922, and collected again near the same place and in another field about a mile distant in 1923. The type of this species is from Courtney, Mo.

Thalictrum venulosum Trelease

Shore of Lake Champlain south of Westport. *H. D. House 10323,* July 12, 1924.

Geranium Bicknellii Britton

On rocks and ledges at Port Henry. *H. D. House 10326,* July 12, 1924, along with Potentilla inclinata Vill., no. 10327.

Phragmitis Phragmitis (L.) Karst.

Banks of the Hudson river just below the bridge at Newcomb. *H. D. House 10711,* September 21, 1924. The plants were rather small and few of them were fruiting. The altitude here is about 1550 feet, and I have no record of this at any higher altitude in the State.

Eleocharis olivacea Torrey

Muddy shores of the outlet of Lake Harris, Newcomb. *H. D. House 10730,* September 22, 1924.

Gnaphalium Macounii Greene

Along a wood road near Newcomb. *H. D. House 10697,* September 20, 1924. Perhaps not native here.

[1] Bryologist 5: 5. 1902.
[2] North American Flora 22: 506. 1918.

Pyrola chlorantha Sw.

Paradox lake. *E. P. Killip 12585,* August 16, 1924.

Rosa Bourgeaniana Crepin

Westport, *C. H. Peck,* June and July 1892 (determined by Mrs Erlanson). Reported by Doctor Peck as Rosa Sayi.

Rosa serrulata Raf.

Mt Defiance near Ticonderoga, *C. H. Peck,* but designated by him as Rosa humilis (determined by Mrs Erlanson).

Rosa virginiana Mill

On ledges of rock, Port Henry, *House 10330,* July 12, 1924. This is the most northern record known in the state for this rose.

Plants collected at Lower Jay, Essex county. On July 11th, my attention was attracted to some outcropping ledges of rock close to the state highway near Lower Jay, upon which was conspicuous a number of Jack pines, Pinus Banksiana Lamb. The following list of plants collected at this spot is interesting as indicating the nature of the flora here. They are listed in the order of collection.

Pinus Banksiana Lamb.
Carex brevior (Dewey) Mackenzie
Clinopodium vulgare L.
Panicum huachucae silvicola Hitchc. & Chase
Carex normalis Mackenzie
Potentilla arguta Pursh.
Panicum latifolium L.
Ribes Cynosbati L.
Cornus femina Mill.
Selaginella rupestris (L.) Spreng.
Woodsia Ilvensis (L.) R. Br.
Anemone virginiana L.
Quercus rubra L.
Minuartia Michauxii (Fenzl.) Farwell
Rhus typhina L.
Ranunculus fascicularis Michx.
Carex blanda Dewey
Geranium carolinianum L.
Panicum tsugetorum Nash
Potentilla argentea L.
Woodsia obtusa (Spreng.) Torrey
Specularia perfoliata (L.) A. DC.
Filix fragilis (L.) Underw.
Capnoides sempervirens (L.) Borck.
Silene antirrhina L.
Carex cephalophora Muhl.
Ostrya virginiana (Mill.) K. Koch.
Ribes rotundifolia Michx.
Panicum implicatum Scribn.
Agrostis palustris Huds.

Agrostis hiemalis (Walt.) B. S. P.
Epilobium palustre L. Var.
Myosotis virginica (L.) B. S. P.
Juncus secundus Beauv.
Carex platyphylla Carey
Galium circaezans Michx.
Polygala polygama L.
Cardamine parviflora L.
Festuca obtusa Spreng.
Hystrix Hystrix (L.) Millsp.
Danthonia spicata (L.) Beauv.
Antennaria neodioica Greene
Carex heterosperma Wahl. (anceps)
Carex radiata (Wahl.) Dewey
Carex convoluta Mackenzie
Juniperus depressa Pursh
Panicum linearifolium Scribn.
Comptonia peregrina (L.) Coulter
Oenothera pumila L.

This list of plants is remarkable for only a few items. It was entirely unexpected to find in this section of the State undoubted specimens of Geranium carolinianum, Panicum latifolium, Woodsia obtusa and Polygala polygama.

Hamilton county

Betula coerulea Blanchard

In rather poor soil, along Indian lake road about 2 miles from Blue mountain lake. *H. D. House 10576*, August 19, 1924.

Alnus viridis var. **Fernaldii** House

(Alnus mollis Fernald)

Sandy soil, near Little Tupper lake. *H. D. House 10681*, September 19, 1924.

Solidago Randii (Porter) Britton

Sandy soil, Little Tupper lake. *H. D. House 10690*, September 19, 1924.

Aster novi-belgi L.

Common in various situations at Little Tupper lake. *No. 10688* with white rays, and more nearly entire leaves than the common form; *no. 10687* with reddish-purple rays, nearly the color of those in Aster novae-angliae f. roseus; *no. 10680* with light-blue rays. Forms with pink rays, intermediate between *10688* and *10687* were also noted.

Aster Blakei (Porter) House

Marshy border of a small pond about 6 miles east of Long lake. *H. D. House 10679*, September 19, 1924. This was first mentioned

by Peck as A. nemoralis var. major (47th Rep't N. Y. State Mus. 155. 1894), and described at about the same time by Porter as A. nemoralis var. Blakei (Torr. Club Bul. 21: 311. 1894). It is undoubtedly a hybrid between Aster acuminatus and A. nemoralis, as indicated in the Annotated List (p. 711).

Plants collected on Long lake. The road at Long lake crosses a small island, and from the south end of this island there extends at low water a gravelly bar (sandy on the inside) to the mainland, which at this point is covered with a stand of Norway pine (Pinus resinosa Ait.). This bar cuts off a small shallow bay which in late summer is well filled with various forms of water loving plants. The entire area including the small island, the pine woods and the bay would not exceed 2 acres. The following plants were collected here, listed in the order of collection, the place being visited 3 times during the season of 1924:

Gaylussacia baccata (Wang.) K. Koch.
Carex oligosperma Michx.
Carex exilis Dewey
Veronica serpyllifolia L.
Pinus resinosa Ait.
Aronia melanocarpa (Michx.) Britton
Prunus depressa Pursh
Alnus incana (L.) Medic.
Alnus viridis (Chaix) DC.
Viola lanceolata L.
Amelanchier sanguinea (Pursh) DC.
Comarum palustre L.
Salix pedicellaris Pursh
Vaccinium canadense Kalm
Vaccinium angustifolium Ait.
Carex lenticularis Michx.
Juniperus communis var. depressa Pursh
Oryzopsis pungens (Torr.) Hitchc.
Sanicula marilandica L.
Potentilla tridentata Ait.
Arctostaphylos uva-ursi (L.) Spreng.
Comptonia peregrina (L.) Coulter
Carex vesicaria var. monile (Tuckerm.) Fernald
Pyrola chlorantha Sw.
Sorbus americana Marsh.
Oryzopsis asperifolia Michx.
Cornus stolonifera Michx.
Chimaphila umbellata (L.) W. Barton
Ilexverticillata var. tenuifolia Torrey
Aster junceus Ait.
Sium cicutaefolium Schrank
Calamagrostis inexpansa A. Gray
Spartina Michauxiana Hitchc.
Scirpus americanus Pers.
Scirpus Torreyi Olney
Cyperus dentatus Torrey
Melampyrum lineare Lam.
Apocynum androsaemifolium L.

Panicum spretum Schultes
Drosera rotundifolia L.
Drosera intermedia Hayne
Carex cryptolepis Mackenzie
Andropogon scoparius Michx.
Lysimachia terrestris (L.) B. S. P.
Calamagrostis canadensis L.
Hypericum boreale (Britton) Bicknell
Solidago Randii (Porter) Britton
Carex viridula Michx.
Sanguisorba canadensis L.

Prunus depressa has been collected here by Peck as well as by others. It is a very conspicuous thing on the shore of the lake. Quite unexpected were the four grasses: Calamagrostis inexpansa, Spartina Michauxiana, Andropogon scoparius and Panicum spretum. All of the other species in this list are more or less characteristic of the lake shores in this region.

Herkimer county

Cephalozia planiceps (Austin) Lindb.

In sphagnum bog, near Little Moose lake. *C. C. Haynes 1588,* August 2, 1913.

Cephaloziella Hampeana (Nees) Schiffn.

On earth in rock crevices, Bald mountain. *C. C. Haynes* Hepat. Amer. No. 49, June 22, 1908.

Metzgeria pubescens (Schrank) Raddi

On granite boulders, Little Moose lake. *C. C. Haynes 1563,* July 31, 1913.

Carex Sprengelii Dewey

Rocky woods east of Little Falls. *H. D. House 10134,* June 23, 1924.

Vaccinium canadense L. f. **chiococcum** Deane

Near Old Forge. *E. W. Blue,* September 8, 1924. Fruit white or nearly so when mature, usually with a slight pinkish tint on one side.

Jefferson county

During the latter part of June 1922, a trip was made to the Black river region below Watertown. Extraordinary high water in the river made impossible the examination of many spots which in

ordinary seasons are botanically very interesting. Among the many plants collected only the following need be noted:

Camptosorus rhizophyllus (L.) Link
Cryptogramma Stelleri (Gmel.) Prantl.
Agropyron tenerum Vasey
Poa debilis Torrey
Panicum tennessense Ashe
Panicum xanthophysum A. Gray
Trisetum spicatum (L.) Richter
Danthonia compressa Austin
Bromus Kalmii A. Gray
Carex alopecoidea Tuckerm.
Carex brevior (Dewey) Mackenzie
Carex cephaloidea Dewey
Carex Deweyana Schw.
Carex grisea Wahl.
Carex eburnea Boott
Carex tenera Dewey
Quercus macrocarpa Michx.
Minuartia Michauxii (Fenzl.) Farwell
Geranium Bicknellii Britton
Symphoricarpos racemosus Michx.
Rhus aromatica Ait.
Rosa blanda Ait.
Houstonia longifolia Gaertn.
Aster ptarmicoides T. & G.
Arabis Drummondii A. Gray
Amelanchier stolonifera Wiegand
Viburnum affine Bush, var. hypomalacum Blake
Lepargyraea canadensis (L.) Greene
Comandra umbellata (L.) Nutt.
Fraxinus pubescens Lam.
Arctostaphylos uva-ursi (L.) Spreng.
Ceanothus americanus L.
Polygala Senega L.
Viola septentrionalis Greene
Arabidiopsis Thaliana (L.) Britton
Taenidia integerrima (L.) Drude

Carex Peckii E. C. Howe

Dry woods near Woodville. *H. D. House, 10083,* June 17, 1924.

Saururus cernuus L.

Sixtown pond and creek near Henderson. *H. D. House, 10066,* June 17, 1924. Plants not mature at this date. Flowering plants were secured here in July.

Potamogeton praelongus Wulf.

Pierrepont pond, an inlet from Lake Ontario, near Woodville. *H. D. House 10070,* June 17, 1924.

Poa saltuensis Fernald & Wiegand

Moist woods near Woodville. *H. D. House 10066,* June 17, 1924.

Smilax herbacea L.

The common form of the species in this State, and which I take to be the typical form of the species, has ovate leaves, rarely narrowly ovate, acute to acuminate and cuspidate at the apex, broadly obtuse, rounded or subcordate at the base, the broadest ones being broadest below the middle and more or less tapering to an abruptly rounded, blunt or acute apex.

var. **latifolia** House, var. nov.

Leaf blades broadly rounded or suborbicular, rounded at the cuspidate apex, entire, cordate or deeply cordate at the base, broadest across the middle of the blade, 2–3 inches long and as broad, or the lower leaves slightly broader than long, and the upper leaves slightly longer than broad, somewhat paler green beneath than on the upper surface, but neither downy nor distinctly glaucous.

Thickets on the sand dunes along the east shore of Lake Ontario, near Woodville. *H. D. House 8858,* June 20–21, 1922.

Lewis county

Eriophorum callithrix Cham.

Open marsh near Watson. *H. D. House 10100,* June 18, 1924.

Polemonium VanBruntiae Britton

Alder swamp west of Parkers (township of Montague), *Neil Hotchkiss 661,* July 1, 1923. Heretofore known only from a few localities south of the Mohawk valley in the counties of Delaware, Ulster, Otsego, Herkimer and Madison.

Antennaria Parlinii Fernald

Thin woods near Copenhagen. *H. D. House 10093,* June 18, 1924.

Madison county

Asarum acuminatum (Ashe) Bicknell

Rich leafmold in dense mixed forest of hemlock and hardwoods, on Helderberg limestone formation, about 2 miles south of Oneida, at an altitude of about 1000 feet. *H. D. House 10018,* June 12, 1924. This was described as a campestrian species, but its habitat here is anything but that. The state herbarium also contains a specimen collected by H. B. Lord at Ludlowville, Tompkins county.

Rubus Baileyanus Britton

Roadside thicket near Oneida. *H. D. House 10038a,* June 15, 1924.

Saxifraga pennsylvanica L.

A. M. Johnson described Saxifraga purpuripetala in 1919 (Minn. Biol. Stud. 4: 51), citing specimens from Vermont and New Jersey. Type specimens have not been examined but from the description it appears to differ from S. pennsylvanica, chiefly by its purple petals. Various colonies of the swamp saxifrage were examined during 1923 and 1924 and the search was rewarded by finding the plant described by Johnson rather abundant in the swamps around Peterboro. Here it grows with the typical form of S. pennsylvanica which has dull creamy yellow petals, almost white in dried specimens. It can not be regarded as more than a color form of the species, characterized by its reddish or rosy purple petals and yellow to orange colored anthers, and may be designated as forma purpuripetala (Johnson) comb. nov.

Botrychium angustisegmentum (Pease & Moore) Fernald

In low woods near White's Corners, town of Eaton. *H. D. House,* June 24, 1924.

Oneida county

Thelypteris Goldiana (Hook.) Nieuwland

Moist, wooded bank along the headwaters of the Mohawk river near Dunn brook, town of Western. *H. D. House 10112,* June 18, 1924.

Carex Frankii Kunth

Wet, open woods, east of Oneida. *H. D. House 10812,* October 28, 1924. This sedge was reported from here in the Annotated List (p. 199) on the basis of three rather immature specimens collected here in 1918 and determined by Mr Mackenzie. Subsequent search failed to reveal more of it until this season when the search was extended into some nearby open, wet woods where it was found very abundant, and at this date mostly overmature, but numerous specimens were collected and have been distributed to several herbaria.

Arisaema Stewardsonii Britton

Low woods near Camden, *H. D. House 10040,* June 16, 1924. Also collected at Clayville, June 23, 1917. Distinctly a plant of the Alleghanian and lower Canadian zones in this State. Some authorities have apparently doubted whether this was distinct or not from A. triphyllum. Herbarium specimens lose much of their distinctive character in drying. After studying this in the field for

several seasons I am abundantly convinced that it is specifically distinct from A. triphyllum. The leaves are green beneath, never glaucous as in A. triphyllum, but the most distinct characters are found in the spathe, the tube of which is more attenuated at the base, white or whitish, externally, with pale green stripes, and deeply fluted, striped with brownish purple within, the upper portion and the acuminate apex of the spathe pale green and without stripes or other color on either side.

Mimulus Moschatus Dougl.

Moist shady places among rocks along Fish creek near Taberg. *Neil Hotchkiss 1820,* September 18, 1924.

Rubus sativus (Bailey) Brainerd

Sandy thickets, edge of pine woods near North Bay. *H. D. House 10121,* June 21, 1924.

Onondaga county

Linum catharticum L.

Wet places in seepage along a brook in a pasture near Marcellus, *Neil Hotchkiss 703,* July 13, 1923. Native of Europe and reported as naturalized in Nova Scotia and Ontario. Not previously reported from this State.

Ontario county

Viola Baxteri House

Dr B. L. Robinson has generously called my attention to the fact that the citation for this species in the Annotated List (N. Y. State Mus. Bul. 254: 500), is incorrect, and that through some clerical error refers to Veronica Baxteri. The name Viola Baxteri should have been indicated there as a new species, based upon the description of V. perpensa given in N. Y. State Mus. Bul. 197: 58. 1918, which proves to be a misidentification of the plants collected by Baxter. Although obviously allied to Viola palmata L. it seems to be in the writer's opinion specifically distinct from that species.

Orange county

Castilleja coccinea (L.) Spreng.

Near Port Jervis. *Emelie A. Salisbury,* June 4, 1924.

Oswego county

Serapias Helleborine L.

Riverside cemetery woods near Oswego. *E. P. Killip 12520,* August 8, 1924.

Salix syrticola Fernald

On sand dunes along the shore of Lake Ontario, at Selkirk (Port Ontario). *H. D. House 10060,* June 16, 1924. This was first collected on the shore of Lake Ontario near Woodville, Jefferson county, in 1921 and 1922 by the writer. As no reports for those years have been published the report of it first appears in the Annotated List (p. 264). Meanwhile Fernald and Wiegand reporting upon plants collected during 1923 in the Ontario and St Lawrence basins record Salix syrticola from the same general region (Rhodora 25: 205–14. 1923).

Rensselaer county

Sparganium chlorocarpum Rydberg

Glasshouse lake. *H. D. House 10427,* August 2, 1924.

Pinus resinosa Ait.

East Postenskill. *H. D. House 10360,* July 19, 1924.

Spiraea tomentosa forma **albiflora** (Raf.) Macbride

East Nassau. *H. D. House 10435,* August 2, 1924. In one marsh, the white flowered form of this species was found to the entire exclusion of the usual red flowered typical form.

Mentha canadensis var. **glabrata** Benth.

Shore of Tomhannock reservoir. *H. D. House 10616,* August 29, 1924.

Dracocephalum virginicum L.

Roadside, town of Brunswick. *H. D. House 10615,* August 29, 1924. Conditions pointed to the suspicion that the species had been introduced here and was not native.

Rosa obovata Raf.

Edge of pine woods, Averill Park, *House 10356,* July 19, 1924.

Rosa virginiana Mill

Pine woods near Valley Falls, *House 8398,* 1921. This and the preceding species determined by Doctor Rydberg and Mrs Erlanson.

Viola fimbriatula J. E. Smith

Among the hybrid violets in this group, in addition to those already listed in the Annotated List (p. 505–6), is the following, found growing with V. fimbriatula and V. latiuscula Greene, in open woods in the eastern portion of the town of Brunswick:

x **Viola Egglestoniana** hyb. nom. nov. (V. fimbriatula x latiuscula Brainerd, Bul. Vermont Agr. Exp. Station 239: 107. 1924).

Viola latiuscula Greene

As noted above, this species was found in the town of Brunswick. Brainerd (l. c. 137) reports a hybrid between this species and Viola sororia from near Hoosic Junction, which following the binomial characterization adopted in the Annotated List, may be designated as x **Viola vermontana** hyb. nom. nov.

Richmond county

Among the violet hybrids overlooked in compiling the species for the Annotated List of New York plants, are the following:

x **Viola Dowelliana** hyb. nom. nov. (Viola affinis x hirsutula Dowell, Torrey Club Bul. 37: 171. 1910). Egbertville, Staten Island. *Dowell* (See Brainerd, l. c. 27).

x **Viola egregia** hyb. nom. nov. (Viola Brittoniana x sororia Dowell, Proc. Staten Island Assoc. 3: 161. 1911). Staten Island. *Dowell.*

Saratoga county

Panicum Scribnerianum Nash

Sandy soil, roadside, near Bemis Heights. *H. D. House 10334,* July 12, 1924.

Agropyron tenerum Vasey

Sand plains south of Glens Falls. *H. D. House 10150,* June 30, 1924. Det. Chase.

Verbena angustifolia Michx.

Sand plains south of Glens Falls. *H. D. House 10144,* June 30 and September 18, 1924.

Bidens trichosperma (Michx.) Britton

Low ground near Wilton. *Mrs O. P. Phelps,* September 13, 1924. Perhaps introduced from farther south.

Suffolk county

Draparnallia acuta (Ag.) Kutz.

This alga, determined by Hazen, was found in fresh water pools near Mattituck. *Roy Latham,* March 1, 1924.

Carex silacea Olney

Southampton beach. *H. D. House 9737,* August 15, 1923.

Rosa Bicknellii Rydberg

Yaphank. *C. H. Peck.* September (1889). Det. Rydberg.

Rosa Lyoni Pursh

Montauk Point. *H. D. House 9728,* August 15, 1923. West Hampton. *Peck.* Also collected at Merrick, Nassau county. *H. D. House,* June 21, 1916 and photographed as Rosa virginiana in the Wild Flowers of New York. Northward in the State this has been collected at Pine Plains, Dutchess county, *Peck;* Glenmont, Albany county, *House 6573,* July 29, 1919, and Helderberg mountains, *Peck.* All of the specimens cited determined by Doctor Rydberg.

Cephalozia macrostachya Kall.

In a sandy bog near Southold. *Roy Latham,* September 25, 1915.

Tioga county

Calamagrostis Porteri A. Gray

Apalachin. *F. E. Fenno,* July 20, 1900. Sent to the state herbarium as C. cinnoides, but recently determined by Mrs Chase as C. Porteri, heretofore known in this State only from Sullivan hill, Chemung county, collected by *T. F. Lucy* in 1895.

Tompkins county

Carex cryptolepis var. **prolifera** (H. B. Lord) comb. nov.

Carex irregularis Schw. Ann. Lyc. N. Y. 1: 66. 1824
Carex Oederi var. prolifera H. B. Lord, 19th Rep't N. Y. State Mus. 76. 1866

Ludlowville. *H. B. Lord* (type or cotype in herbarium of N. Y. State Museum). Marl pond outlet, Cortland county, *Peck.* Lake Harris, Essex county, *House.*

This variety seems to be always associated with C. cryptolepis, which has had a very checkered nomenclatorial career. Often designated as a variety of C. flava L., or C. Oederi Retz, it seems first to have been described by Michaux as C.

Oederi, but is not the C. Oederi of Europe. Dewey called it C. lepidocarpa, an untenable name; the seventh edition of Gray's manual designated it as C. flava var. rectirostra; and lastly Mackenzie has described it as Cares cryptolepis (Torreya 14: 157. 1914; N. Y. State Mus. Bul. 254: 195. 1924).

Asarum acuminatum (Ashe) Bicknell

Ludlowville. *H. B. Lord* (see under Madison county).

Trollius laxus Salisb.

Near Malloryville. *F. A. Ward,* July 26, 1924. Mr Ward also sends specimens of the three following species collected at Malloryville:

Limnorchis hyperborea (Nutt.) Rydb.
Cypripedium reginae Walt.
Cirsium muticum Michx.

Ulster county

Webera sessilis (Schmid.) Lindb.

On ground in woods, Vernooy kill camp (Potterville), about 1000 feet altitude. *H. D. House,* August 8, 1922. In the state herbarium this is labelled by Doctor Peck as Diphyscium foliosum Web. & Mohr., the specimens being from Ganseyoort and Sandlake, collected by Doctor Peck. Burnham (Bryologist 23: 23. 1920) reports it from Washington county.

Rosa obovata Raf.

Dry woods, Napanoch. *H. D. House 8545, 8546,* August 19–21, 1921. Determined by Rydberg.

Warren county

Sparganium minimum Fries

Edge of a small pond near Chestertown. *H. D. House 10455,* August 8, 1924, growing with Eriophorum tenellum Nutt. and Andromeda glaucophylla Link.

Carex Merritt-Fernaldii Mackenzie

In sandy soil near roadside, Chestertown. *H. D. House 10459,* August 8, 1924.

Pentstemon pallidus Small

On dry banks near roadside, Loon Lake, near Chestertown, *H. D. House 10154,* June 30, 1924. Like its closely related species, P. hirsutus, probably adventive from the south.

VEGETATION OF THE EASTERN END OF ONEIDA LAKE

SUPPLEMENTARY ACCOUNT

Since the publication of the account of the Vegetation of the Eastern End of Oneida Lake[1] in 1918, additional records have accumulated as a result of further investigations carried on in this region, from a study of specimens collected there and particularly as a result of numerous visits during the past few seasons to the extensive sand plains situated east of the lake.

In the publication just mentioned the writer strongly emphasized (p. 65–68) the austral elements of this vegetation, and the statements made that "the mere age of a geologic formation is of little consequence in determining the character of plant growth. The important factor is the lithologic characters, mechanical and chemical, irrespective of age. A sandy soil, whether a recent dune or one derived from the disintegration of Triassaic or Paleozoic sandstones, is the home of similar sand loving plants, where moisture conditions are the same, however much the areas may differ in altitude within given limits, or in latitude within certain limits and modifications."

Dr Donald Culross Peattie[2] studying the Atlantic coastal plain element in the flora of the Great lakes, assembles a mass of geological data tending to indicate that the coastal plain element of the flora of the Great lakes and especially about Oneida lake, reached this region by migration through the outlets of the glacial lakes, and in the case of Oneida lake, through the Hudson-Mohawk valley outlet of the early stages of Lake Iroquois.

This view is eminently logical and doubtless approximates very closely the true explanation. The writer believes that Doctor Peattie's explanation in no way invalidates the writer's statements:[3] "If we are to consider the various elements of our flora as having migrated northward after the retreat of the ice sheet of the glacial epoch, it is apparent that the first advance forward of any element of the flora at any time will follow the line of least resistance, which means favorable soil conditions, rather than unfavorable conditions, where the climatic influences are otherwise identical." For this reason it is almost axiomatic that the region of sandy plains and its more or less undrained marshes and depressions, which soon developed into acid or marly bogs, should be occupied more quickly

[1] New York State Mus. Bul. 197: 61–110. 1918.
[2] Rhodora 24: 57–70; 80–88. April, May 1922.
[3] House. l.c. p. 66.

and easily by plants migrating from somewhat similar conditions on the coastal plain, rather than by plants from the adjacent Appalachian highlands to the south, where the soils were presumably gravelly drifts, clays and cold humus.

In passing, it should be remarked that the following plants in Doctor Peattie's list should be definitely listed as occurring in the Ontario lowlands, and their inclusion adds strength to his argument:

Andropogon scoparius
Panicum spretum
Panicum meridionale
Panicum albemarlense
Echinochloa Walteri
Ammophila arenaria
Eleocharis interstincta
Rynchospora macrostachya
Nelumbo lutea
Cakile edentula
Hydrocotyle umbellata
Linaria canadensis
Cirsium odoratum

I would add to Doctor Peattie's list the following plants which occur in the Oneida lake region or in the Ontario lowlands of New York, as additional elements of the coastal plain flora to be found in the region of the Great lakes:

Azolla caroliniana
Cyperus filiculmis
Scleria triglomerata
Panicum Lindheimeri
Panicum Ashei
Panicum agrostoides
Panicum tennessense
Habenaria ciliaris
Saururus cernuus
Comptonia peregrina
Ibidium gracilis
Sassafras Sassafras
Meibomia Michauxii
Sarothra gentianoides
Rhexia virginica
Nyssa sylvatica
Trichostema dichotoma
Aster linearifolius
Panicum aculeatum
Carex tonsa
Carex laevivaginata
Cenchrus pauciflorus
Ipomoea pandurata

Regarding some of the other plants mentioned in Doctor Peattie's list, there is a measure of doubt regarding either their being characteristic plants of the coastal plain flora or their occurrence in the Ontario lowlands, as for example:

Nias gracillima. Once collected near Albany, but unknown from the Ontario lowlands.

Carex exilis. This is, of course, occasional on the Ontario lowlands, but is, like Viola lanceolata, Sanguisorba canadensis, Lycopodium inundatum, Utricularia resupinata and a number of other species, more characteristic of lake shores or acid bogs of the Adirondack plateau region, as well as the coastal plain, and their migrations northward, if it be assumed that such migrations have taken place, have evidently followed along a different series of influences than merely along the sandy and shore influences of the outlets of the glacial lakes.

Orontium aquaticum. This occurs in the Hudson river northward to Saugerties, has been collected many years ago in Fulton

county north of the Mohawk valley, and is found sparingly in the upper Susquehanna region (Clute), but I know of no records for it in the Oneida lake region or in the Ontario lowlands of this State.

In the following notes and additions to the list of plants of the eastern end of Oneida Lake, those species preceded by a star (*) have not been previously reported from this region.

Ophioglossum vulgatum L.

Typical specimens were found near Fort Bull, west of Rome, and are not uncommon about Sylvan Beach. In the sterile soil of sandy depressions specimens are sometimes found which measure little more than 5 or 6 cm in height, but are fertile. Such plants apparently represent what was described by Rafinesque[4] as O. pusillum, and by Beck[5] as O. Grayi. Gradations between them and the typical form of the species often occur in the same spot, so that it is apparent that these dwarfed forms have little systematic value, but have been designated as O. vulgatum forma pusillum.[6]

Dryopteris simulata Davenport

An additional locality for this rare fern was discovered in low, sunny woods and an open, marshy clearing adjacent to the woods, about 2 miles north of New London, July and August 1918. The fern is very abundant here and the locality is about 4 miles east of Sylvan Beach, where it was found several years ago[7] and where it still grows in a very limited area and in danger of extermination by the building of cottages and the filling in of the low ground.

Picea rubens Sargent

In low woods about 3 miles north of New London, at an altitude of only 400 feet, occur numerous red spruce trees from 4 to 10 inches in diameter at the base, and some of them 40 to 60 feet tall. Only a few scattered seedling trees had been previously found near Sylvan Beach.

***Larix laricina** (DuRoi) Koch

Reported by W. C. Muenscher[8] from near Sylvan Beach and from the marshes in the sand plains a few miles east of the lake, where it was also seen in 1922 by the writer.

---

[4] Jour. Bot. Desv. (II) 4: 273. 1814.
[5] Bot. N. & Mid. States 458. 1833.
[6] House. New York State Mus. Bul. 243–44: 42. 1923.
[7] House. Torreya 3: 116. 1903.
[8] Letter dated December 2, 1922.

***Lycopodium clavatum** var. **megastachyon** Fernald & Bissell

In low woods near New London. *H. D. House,* July 15, 1918.

***Equisetum laevigatum** A. Br.

Sandy shores of Oneida lake, at Sylvan Beach. *H. D. House 5450,* June 5, 1914. Previously reported as E. hyemale intermedium. Doctor Haberer has also collected a proliferous branched form at Oneida lake.[9]

***Typha angustifolia** L.

Common along the shores of Oneida lake at South Bay, Madison county, and elsewhere along the south shore of the lake and more rarely inland east of the lake. Most of the plants growing along the lake belong to the so-called variety longispicata Peck.[10]

Typha latifolia L.

In 1886 Professor Dudley[11] described from the Cayuga marshes a variety "elongata," of the common cat-tail. The specimens in the state herbarium from the Cayuga marshes, sent by Professor Dudley, and which presumably represent his variety, since they are so labeled by him, have the pistillate spikes 20–23 cm long, and 2–2.5 cm thick. Professor Dudley states that the leaves are 2–3½ mm wide, but the specimens in the state herbarium have leaves 5–10 mm wide and convex. It is quite possible that his elongata occurred in both Typha latifolia and T. angustifolia. The same extreme occurs in specimens of both Typha latifolia and Typha angustifolia in the Oneida lake region, and in both cases numerous gradations between forms with very long pistillate spikes and forms with very short pistillate spikes are not lacking.

***Potamogeton americanus** C. & S.

In shallow water. South Bay, Madison county. *H. D. House 1917.*

***Potamogeton bupleuroides** Fernald

Oneida lake, off Verona beach lighthouse. *W. C. Muenscher 14534,* September 13, 1922.

Scheuchzeria palustris L.

Abundant in an extensive bog on the sand plains about 6 miles west of Rome, July 12, 1919. Kneiskern reported this species as abundant in the swamps near Rome many years ago.

[9] New York State Mus. Bul. 243–44: 47. 1923.
[10] 47th Rep't N. Y. State Mus., 162 (Bot. ed. 36). 1894.
[11] Dudley. Cayuga Flora 102. 1886.

***Sagittaria rigida** Pursh

In shallow water and on wet sandy beaches, near the mouth of Oneida creek, Madison county. *H. D. House 8290,* June 27, 1921.

***Sparganium acaule** (Beeby) Rydberg

Banks of Fish creek, above Fish Creek Landing. *W. C. Muenscher 14531,* September 17, 1922.

Panicum xanthophysum A. Gray

Very common in the pine barrens, 2 to 3 miles north of New London, where collected on July 19, 1918.

***Panicum aculeatum** Hitchc. & Chase

Sandy thickets along the shore of Oneida lake, near Sylvan Beach. *H. D. House 8140,* June 20, 1921.

***Panicum Tuckermani** Fernald

Reported by W. C. Muenscher from near the shore of Oneida lake at South Bay, Madison county, *no. 14557,* September 14, 1922. For a discussion regarding the status of this grass see New York State Museum Bulletin 254 : 74. 1924.

Echinochloa Crusgalli var. **Michauxii** House

Known also under the name of E. muricata (Michx.) Fernald. Common near Sylvan Beach. *H. D. House,* September 18, 1916. The form described by Wiegand as E. muricata var. microstachya, is reported from Sylvan Beach by W. C. Muenscher.[8]

***Oryzopsis asperifolia** Michx.

Frequent in the dry pine woods and clearings north of New London, often in company with Panicum xanthophysum.

***Oryzopsis pungens** (Torrey) Hitchc.

Open, sandy woods often under pine trees, north of New London. *H. D. House 8307,* June 28, 1921.

***Bromus inermis** Leyss.

In waste ground near Sylvan Beach. *H. D. House 5501,* June 8, 1914. Adventive or naturalized.

***Elymus virginicus** var. **hirsutiglumis** (Scribn.) Hitchc.

Near the lake shore at North Bay, Oneida county. *W. C. Muenscher 14580,* September 15, 1922.

***Eragrostis Frankii** Steud.

Reported from Fish creek, near the eastern end of Oneida lake, by W. C. Muenscher.

***Eriophorum callithrix** Cham.

Very abundant in a bog on the sand plains about 4 miles northwest of Rome, and in another bog about 6 miles west of Rome and 1 mile north of the barge canal. Collected during the summers of 1918 and 1919.

***Scirpus cyperinus** var. **pelius** Fernald[12]

Reexamination of the specimens collected at Oneida lake shows that typical Scirpus cypedrinus has not been collected there although I have no doubt it may occur there rarely. All of the collections made belong to the variety pelius, which seems to mature here a week or 10 days earlier than the forma congestus House.[13]

Carex oligosperma Michx.

Previously reported on the authority of Kneiskern and Paine. On July 12, 1919, found in abundance throughout large bogs of the sand plains about 6 miles northwest of Rome, and probably in about the same locality where it was said by Paine to be common.

Carex Asa-Grayi Bailey

Moist sandy woods along the shore of Oneida lake, north of Sylvan Beach. *H. D. House 8127,* June 21, 1921.

***Carex leucorum** Willd.

Common in sandy fields north of New London. *H. D. House 6099,* June 4, 1919. Commonly regarded as a variety of Carex pennsylvanica Lam.

***Carex tonsa** (Fernald) Bicknell

Frequent in sandy fields north of New London, and throughout most of the sandy plains east of Oneida lake. *H. D. House 6100,* June 4, 1919.

***Carex laevivaginata** (Kukenth.) Mackenzie

Collected near Verona several years ago by Doctor Peck, and more recently at several localities in Oneida and Madison counties. Not rare in the low woods east of Oneida lake.

---

[12] Rhodora 8 : 164. 1906.
[13] New York State Mus. Bul. 254:150. 1924.

***Carex incomperta** Bicknell

Low woods near Sylvan Beach. *H. D. House,* June 17, 1918.

Carex rosaeoides E. C. Howe

Sylvan Beach, Oneida county. *H. D. House,* June 8, 1914. The determinations of all of the species of Carex here reported were made by Kenneth Mackenzie.

***Cyperus diandrus** Torrey

Reported from Sylvan Beach, by W. C. Muenscher.[8]

***Cenchrus pauciflorus** Bentham[14]

Common in sandy fields near Sylvan Beach. *H. D. House 5832,* August 10, 1914, and also reported from Fish creek by W. C. Muenscher.[8] This species was formerly called Cenchrus tribuloides, until 1908, when Professor Hitchcock[15] applied the name C. carolinianus Walter to the plant. The species is native of the southern and southwestern states, and has migrated northward, following sandy soils, along the coastal plain to New York and Massachusetts. It had appeared on the sandy plains between Albany and Schenectady as early as 1835[16] and was also reported from there by Paine,[17] but Paine does not mention having found it at Oneida lake, and it may be assumed that the plant has reached Oneida lake since 1865.

***Juncus articulatus** var. **stolonifer** (Wohlleb.) House[18]

Growing on moist or wet sandy beaches near Lewis Point, south shore of Oneida lake. *H. D. House,* October 21, 1920.

***Juncus marginatus** Rostk.

In an old stone quarry near Verona. *H. D. House,* August 26, 1918. Determined by Coville.

***Clintonia borealis,** forma **albicarpa** Killip

Occasional in low wet woods about 3 miles north of New London.

***Streptopus amplexicaulis** (L.) Michx.

Frequent in the deep swamps and low woods along Wood creek, north of New London.

---

[14] Hitchcock & Chase. Contr. U. S. Nat. Herb. 22: 67. 1920.
[15] Hitchcock. Contr. U. S. Nat. Herb. 12: 127. 1908.
[16] James Eights. The Albany Zodiac. 1835.
[17] J. A. Paine jr. Cat. Pl. Oneida Co. & Vic. 174. 1865.
[18] New York State Mus. Bul. 254: 213. 1924.

Smilax hispida Muhl.

Reported by *W. C. Muenscher,*[8] from Sylvan Beach.

Cypripedium arietinum R. Br.

Moist woods on the sand plains east of Oneida lake, and about 5 miles east of Sylvan Beach, and 6 or 7 miles northwest of Rome, near Humaston station. *Frederick B. Hodges,* June 10, 1922. This may be the same locality discovered by Asa Gray[19] or at least the same general region. After more than three-quarters of a century, with all the intervening devastation resulting from lumbering and fire, it is interesting to find this rare orchid still flourishing here. On June 28, 1922, Mr Hodges conducted me to the spot where I was able to note a number of vigorous plants.

***Blephariglottis Blephariglottis** (Willd.) Rydberg

Frequent in an extensive bog which occupied one of the numerous undrained depressions in the sand plains about 6 miles northwest of Rome.

***Ibidium plantagineum** (Raf.) House

Marshy shores of Oneida lake at South Bay, Madison county, and on mossy banks about 4 miles northwest of Rome, in the pine plains. Ibidium gracile (Bigel.) House, previously reported from Sylvan Beach, is frequent throughout all of this region in open sandy fields and pine woods.

***Peramium tesellatum** (Lodd.) Heller

In pine woods about 3 miles north of New London, Oneida County. *H. D. House,* July 15, 1918.

Comptonia peregrina (L.) Coulter

Previously reported upon the authority of Kneiskern. Since then the species has been seen abundantly in open pine woods and on sandy plains throughout most of the pine plain region north of New London and along the "Oswego road" northwest of Rome toward Humaston.

Quercus ilicifolia Wang.

Common in the sand plains northwest of Rome along the so-called "Oswego road" toward Humaston. *H. D. House 8298,* June 28, 1921. Subsequently seen in a few other sections of the pine plains,

[19] Torrey. Fl. N. Y. 2: 288. 1843.

and also about one-half mile east of Verona beach on the east shore of Oneida lake. It was also collected north of New London by *W. A. Matthews 2215,* July 18, 1922. These collections remove all doubt as to the correctness of Paine's report,[20] which may have been overlooked by Sargent who states that the range of this species "apparently does not reach central New York."[21]

***Populus alba** L.

An introduced tree, native of Europe, reported by *W. C. Muenscher*[8] from Fish Creek Landing.

***Populus candicans** Ait.

Frequently planted at Sylvan Beach, and rarely elsewhere in this region. *W. C. Muenscher*[8] reports it from Sylvan Beach, perhaps as an escape from cultivation.

***Salix sericea** Marsh.

Low ground near Sylvan Beach. *H. D. House,* May 16, 1918. Also reported from the same locality by *W. C. Muenscher.*[8]

***Salix Bebbiana** Sargent

Common in low woods and thickets near Sylvan Beach. *H. D. House,* May 16, 1918.

***Salix tristis** Ait.

Frequent on the sand plains north of New London. *H. D. House 6873,* May 21, 1920.

***Salix longifolia** Muhl.

Near Sylvan Beach. *W. C. Muenscher 14669,* September 13, 1922.

***Alsine aquatica** (L.) Britton

An introduced species common along the old Erie canal, about 1 mile west of the site of old Fort Bull. In flower on July 20, 1918.

***Sedum purpureum** Tausch.

An introduced species frequent along roadsides and railroads about South Bay, Madison county and at Fish creek, Oneida county.

***Ribes cynosbati** L.

Frequent in woods about 3 miles north of New London.

---

[20] Paine. l.c. p. 126.
[21] Sargent. Silva of N. Amer. 8 : 156 (footnote 4). 1895.

***Ribes hirtellum** Michx.

Swamp near Sylvan Beach. *W. C. Muenscher 14734,* September 17, 1922.

***Potentilla arguta** Pursh

Sand plains about 3 miles north of New London. A single plant found, which appeared as though it might be adventive here.

***Crataegus macrantha** Loddiges

North Bay, Oneida county, according to *W. C. Muenscher.*[8]

***Trifolium arvense** L.

Common along railroad tracks and on sandy banks at several localities. Native of Europe.

Polygala polygama Walter

Common in the sand plains 2 or 3 miles north of New London, which is probably in about the same locality from which it was reported by Kneiskern in Paine's flora. A single clump with white flowers (forma albiflora House) was seen.

***Viola papilionacea** Pursh

Roadsides and in low woods along Oneida creek near its mouth. Common and variable.

***Viola septentrionalis** Greene

Occasional or locally frequent in swampy woods north of New London. *H. D. House 6078,* June 4, 1919.

***Kalmia latifolia** L.

Forming large thickets along the edge of swampy woods and on decayed logs, occasionally in the more heavily wooded portions of the swamp, about 3 miles north of New London. August 26, 1918. This is apparently the only report of the mountain laurel in this region. Sartwell reports it from the head of Crooked lake, Yates county, and Bradley reports it from Ithaca.[22] Paine also reports it from near Utica and Oriskany, also in Oneida county, as in the New London locality, but in the Mohawk watershed, while the New London locality lies in the St Lawrence basin. Except for Hankenson's report[23] of this species from Sodus Bay, this is perhaps the most northern record for the mountain laurel in New York State.

---

[22] Paine. l.c. p. 102.
[23] Proc. Rochester Acad. 3: 83. 1896.

***Kalmia Polifolia** L.

Found in the same bog with Carex oligosperma Michx., and Blephariglottis Blephariglottis (Willd.) Rydb., but was apparently not detected here by Paine. *H. D. House 6076,* June 4, 1919.

***Andromeda glaucophylla** Link

In the same bog with the preceding species, but not common, and collected on the same date.

Arctostaphylos uva-ursi (L.) Spreng.

This was included in the list of the Oneida lake plants upon the authority of Gray, who reported it from "near Oneida lake." On August 26, 1918, this species was found in abundance on the open sandy plains about 3 miles north of New London. This may be the locality indicated by Gray since a number of other species reported by Gray, Kneiskern and Paine, seem to occur now, at least, only in this portion of the sand plains and along the "Oswego road."

***Chiogenes hispidula** (L.) A. Gray

Reported by *W. C. Muenscher*[8] from the swamps on the sand plains a few miles east of the eastern end of Oneida lake.

***Vaccinium corymbosum** var. **amoenum** (Ait.) Gray

Reported from the vicinity of Sylvan Beach, by *W. C. Muenscher.*[8]

***Asclepias exaltata** (L.) Muhl.

Open woods on the sand plains about 3 miles north of New London. *H. D. House 8299,* June 28, 1921.

Convolvulus spithamaeus L.

Common in thin woods and in sandy, grass covered fields, of the plains about 3 miles north of New London.

***Solanum carolinense** L.

Sandy fields near Sylvan Beach. Apparently of rather recent introduction.

***Trichostema dichotomum** L.

Common in sandy fields and meadows along Telin's brook, and elsewhere, about 3 miles north of New London. August 27 1918.

***Mentha piperita** L.

Reported by *W. C. Muenscher*[8] from Fish Creek Landing.

***Verbascum Lychnitis** forma **album** (Mill.) House

Occasional with the typical form of the species in fields near Sylvan Beach.

Lobelia Kalmii L.

Very common on the gravelly shores of Oneida lake at Lewis Point, and occasionally elsewhere along the south shore of Oneida lake. August 20, 1918.

***Campanula uliginosa** Rydberg

Plants which appear to correspond to the description of this species are common along the south shore of Oneida lake, in wet places in sandy or gravelly soil, thickly overgrown with other low vegetation. *H. D. House 8360,* July 3, 1921.

***Solidago altissima** L.

Reported by *W. C. Muenscher*[8] from North Bay.

***Solidago patula** Muhl.

Reported by *W. C. Muenscher*[8] from Vienna on the north shore of Oneida lake. This species is abundant in wet places throughout this region and was inadvertently omitted from the list of plants found about the eastern end of Oneida lake.

***Solidago graminifolia** var. **galetorum** (Greene) House

Along the shore of Oneida lake this is apparently the representative form of the species, although inland from the lake the typical species is very common.

***Gnaphalium Macounii** Greene

Uncommon in the sandy fields and plains north of New London. September 2, 1918.

***Helenium latifolium** Mill.

Thickets along the shore of Oneida lake north of Sylvan Beach. *H. D. House 8705,* September 13, 1921. Also seen in October 1923, just north of the mouth of Oneida creek. These plants accord fairly well with the description by Rydberg,[24] except that the heads are chiefly solitary on long, slender peduncles. A more complete description of these plants has already been published.[25]

---

[24] North American Flora 34: 127. 1915.
[25] House. New York State Mus. Bul. 254: 730. 1924.

***Cirsium odoratum** (Muhl.) Britton

Frequent in the thin pine woods on the sand plains about 3 miles north of New London. July 18, 1918.

***Rubus sativus** (Bailey) Brainerd

Edge of sandy woods, North Bay, Oneida county. *H. D. House 10121,* June 21, 1924.

***Rosa palustris** Marsh.

Wet soil, edge of sand plains west of Rome. *H. D. House,* July 20, 1918 (determined by Rydberg).

NOTES ON FUNGI, IX

Aecidium Dicentrae Trelease

On leaves of Capnorchis Cucullaria (L.) Planch. Van Cortlandt park and Williamsbridge, New York City. *Percy Wilson 52 & 230,* April 20, 1915 and April 28, 1916.

Bullaria Hieracii (Schum.) Arthur[1]

On basal leaves of Hieracium canadense Michx., Newcomb, Essex county. *H. D. House,* June 23, 1923.

Cintractia subinclusa (Korn.) Magnus

On pistillate spikes of Carex rostrata Stokes (C. utriculata Boott), Newcomb, Essex county. *H. D. House,* August 10, 1921. Collected by Doctor Peck at Lake Sallie, Essex county, on the same host and also on Carex oligosperma Michx.

Circinostoma S. F. Gray. Nat. Arr. Br. Pl. 1 : 521. 1821.

Calosphaeria Tul. Sel. Fung. Carp. 2: 108. 1863 — Sacc. Syll. Fung. 2: 95. 1883.

The type species is Circinostoma pulchellum S. F. Gray (Sphaeria pulchella Pers., Calosphaeria Princeps Tul.; Calosphaeria pulchella House, N. Y. State Mus. Bul. 233–34: 17. 1921.). Other New York State species are:

Circinostoma ciliatulum (Fr.) comb. nov. (Sphaeria ciliatula Fries; Calosphaeria ciliatula Karst.).

Circinostoma microspermum (E. & E.) comb. nov. (Calosphaeria microsperma E. & E.)

Circinostoma Myricae (C. & E.) comb. nov. (Valsa Myricae C. & E.; Calosphaeria Myricae E. & E.; Eutypella Myricae Sacc.)

Circinostoma scabrisetum (Schw.) comb. nov. (Sphaeria scabriceta Schw.; Eutypa scabriseta B. & C.; Calosphaeria scabriseta Sacc.)

Circinostoma microthecum (C. & E.) comb. nov. (Sphaeria microtheca C. & E.; Calosphaeria microtheca Sacc.)

[1] Determined by Dr H. S. Jackson.

Clavaria amethystina (Battara) Bulliard

Jenny brook, Yama farms, Napanoch, Ulster county. *H. I. Miller* and *Dr F. B. Turck,* August 5, 1922. The specimen is a beautiful compact tuft, 4–6 cm tall. The dried material is a pale or dull lilac color.

Clavaria aurantio-cinnabarina Schw.

Fructifications simple, cespitose, fleshy, rather fragile and easily broken when fresh, as well as when dry; 10–20 cm tall, usually a few, rarely several fructifications united at the somewhat paler or whitish base, rarely growing singly; thickened toward or above the middle where 8–12 mm thick, attenuate toward the base, less so toward the apex which is obtuse, hollow and not compressed when fresh, becoming compressed when dry, golden yellow in color, without distinctive odor, the taste agreeable and distinctly not bitter.

Moist soil in open woods under the shade of ferns. Jenny brook, Yama farms, Napanoch, Ulster county. *Mr and Mrs J. A. Kingsbury* and *H. D. House,* August 9, 1922.

This is the plant commonly designated as Clavaria fusiformis Sowerby, in this State, and as such is not rare. According to English authorities the true C. fusiformis has a bitter taste and a more densely tufted habit and is canary-yellow in color.

Cordyceps agariciformis (Bolton) Seaver

In woods near Vernooy kill camp (Potterville), Ulster county, parasitic on old Scleroderma. *H. D. House,* August 8, 1922. **Cordyceps militaris** (L.) Link, parasitic on buried pupae, was also frequent in the same locality, and also at Yama farms, Napanoch.

Corticium investiens (Schw.) Bres.[2]

On dead limbs of maple, on ground in woods, near Oneida, Madison county. *H. D. House,* October 15, 1920.

Corticium tessulatum Cooke[2]

On decayed wood of hemlock, Osceola, Lewis county. *C. H. Peck.*

Corticium vellereum Ellis & Cragin[2]

On fallen branches of Populus tremuloides Michx., Albany, *H. D. House,* October 15, 1919. Collected by Doctor Peck at Westport (Corticium chlamydosporum Burt, in

[2] Determined by Dr E. A. Burt.

54th Ann. Rep't N. Y. State Mus. 154. 1901), and at Ottawa, Canada, by Macoun (no. 281, October 2, 1897).

Dicaeoma Acetosae (Schum.) Kuntze

On leaves of Rumex Acetosella L., Orient, Long Island. *Roy Latham,* October 15, 1919 (Puccinia Acetosae Korn.)

Dicaeoma asterum (Schw.) Arthur & Kern[1]

A common rust, recorded here for certain unusual hosts, namely, I on Aster acuminatus Michx. Boreas ponds, Essex county. *H. D. House,* July 20, 1922. II–III on Carex Houghtonii Torrey, Elizabethtown, Essex county. *Peck;* on Carex substricta (Kukenth.) Mackenzie, Woodville, Jefferson county. *H. D. House,* September 15, 1922.

Dicaeoma Eatoniae Arthur[1]

Perch lake, Jefferson county, on sheaths, culms and leaves of Sphenophollis pallens (Spreng.) Scribn. (Eatonia pennsylvanica Gray). *H. D. House,* June 27, 1922. The aecial stage occurs on Ranunculus abortivus L.

Dicaeoma Clematidis (DC.) Arthur[1]

Aecial stage on Thalictrum canadense Mill. (T. polygamum Muhl.), Indian pass, Essex county. *H. D. House,* July 15, 1923. The telial stage was also collected here on old culms of Andropogon tenerum Vasey.

Dicaeoma McClatchianum (D. & H.) Arthur[1]

Long lake, Hamilton county, and Cascade lakes, Essex county, on Scirpus microcarpus Presl. (S. rubrotinctus Fernald). *H. D. House,* September 14 and 16, 1920. Previous collections of this rust, on the same host, in this State have been made only in the vicinity of Albany.

Dicaeoma Majanthae (Schum.) Arthur

The aecial stage frequent about Newcomb, Essex county, on leaves of Trillium erectum L., and Trillium undulatum Willd. (Aecidium Trillii Burrill), and also on leaves of Unifolium canadense (Desf.) Greene and Streptopus roseus Michx. *H. D. House,* July 2 and 4, 1923.

Dicaeoma orbicula (Peck & Clinton) Arthur[1]

On leaves of Nabalus albus (L.) Hook. Woodville, Jefferson county. *H. D. House,* June 6, 1923.

Dicaeoma Peckii (DeToni) Arthur[1]

Newcomb, Essex county, on Carex rostrata Stokes, *H. D. House,* August 10, 1921. The aecial stage occurs upon Oenothera biennis L., and more rarely upon Kneiffia perennis (L.) Pennell (Oenothera pumila L.). Pompey, Onondaga county. *House,* June 28, 1916.

Dicaeoma Violae (Schum.) Kuntze

At Newcomb, Essex county, this rather common rust has been collected upon Viola renifolia Gray, V. cucullata Ait., V. septentrionalis Greene, V. incognita Brainerd, V. pallens (Banks) Brainerd, and V. pubescens Ait.

Grandinia sulphurella (Peck) Burt, comb. nov.

Hydnum sulphurellum Peck, 31st Rep't N. Y. State Mus. 38. 1879.

On dead branches on the ground in woods, near Oneida. *H. D. House,* October 15, 1920.[2] The type of Doctor Peck's species was collected at Griffins, and the state herbarium also contains a collection from Ottawa, Canada. *Macoun 14,* September 30, 1902.

Gymnosporangium germinale (Schw.) Kern

I on Amelanchier Bartramiana (Tausch) Roem. (A. oligocarpa (Michx.) Roem.) Newcomb, Essex county. *H. D. House,* July 18, 1922.

Hymenochaete arida Karsten[2]

On dead twigs of Fraxinus nigra Marsh., Newcomb, Essex county. *H. D. House,* July 15–30, 1920.

Hymenochaete badio-ferruginea (Mont.) Lev.[2]

On dead branches, Speculator, Hamilton county. *H. D. House,* August 12, 1920. Indian lake, *Peck.*

Hymenochaete episphaeria (Schw.) Massee[2]

On decayed limbs on the ground in woods, near Oneida, Madison county. *H. D. House,* October 18, 1920.

Hymenochaete tenuis Peck[2]

On dead limbs of Tsuga canadensis (L.) Carr., near Oneida, Madison county. *H. D. House,* October 15, 1920. The type was collected by Doctor Peck at Edmonds ponds, Essex county, on Thuja occidentalis L.

Hypocrea latizonata Peck[3]

In addition to the type, collected by Doctor Peck at Greenbush, Rensselaer, the herbarium contains a collection, heretofore unnamed, made by Doctor Peck at Sand lake, on Cyathus striatus (Huds.) Hoffm.

Hypomyces aurantius (Pers.) Tul.[3]

Newcomb, Essex county, parasitic on Auricularia Auricula (L.) Underw. *H. D. House,* July 15–30, 1920.

Hysterium thujarum Cooke & Peck

Orient, Long Island, on Juniperus virginiana L. *Roy Latham,* January 10, 1923.

Kuehneola Uredinis (Link) Arthur[1]

Hastings, Oswego county, on leaves of Rubus hispidus L. *H. D. House,* September 15, 1922. Also collected, September 27, 1922, on Rubus sativus Bailey, at Panther lake, Oswego county.

Lachnea setosa (Nees) Gill.[3]

Near Oneida, Madison county, on decayed basswood log. *H. D. House,* September 23, 1922.

Leotia marcida Pers.

Woods near Vernooy kill camp (Potterville), Ulster county. *H. D. House,* August 8, 1922. The pileus only is of a bright green color in this species, the stipe being buffy or pale yellowish brown in color.

Macroplodia Sabina House, nom. nov.

Sphaeropsis Juniperi Peck, 39th Rep't N. Y. State Mus. 45. 1889. Not Desm.
Macroplodia Juniperi Kuntze.

On dead bark of Juniperus virginiana L., Orient, Long Island. *Latham.* West Albany. *Peck.*

[3] Determined by Dr F. J. Seaver.

Melampsora americana Arthur[1]

Newcomb, Essex county, on leaves of Salix nigra Marsh. *H. D. House,* August 10, 1921.

Melampsoropsis abietina (A. & S.) Arthur[1]

Newcomb, Tahawas, Calamity pond, Adirondack lodge, and other localities in Essex county, apparently common, on the under surface of leaves of Ledum groenlandicum Oeder. *H. D. House,* June 26–30, 1923. The aecial stage is Peridermium abietinum (A. & S.) Thum. on leaves of Picea rubens, as demonstrated by Fraser in America, and by Klebahn in Europe for other species of Picea.

Melampsoropsis Cassandrae (Peck & Clinton) Arthur[1]

On leaves of Chamaedaphne calyculata (L.) Moench, in bog at base of Moxon mountain, near North Creek, Warren county. *H. D. House,* June 26, 1923. Also on the same host at Newcomb, Calamity pond, and other localities in Essex county, always in association with Picea mariana (Mill.) B. S. P., upon which the aecial stage, Peridermium consimile A. & K. occurs. There is also in the herbarium a specimen of the aecial stage from Junius swamp, Seneca county, collected by *E. J. Durand,* July 1905.

Empusa americana Thaxter

Orient, Long Island, on blow flies (*Calliphora vomitoria*). *Roy Latham,* August 20, 1920 and October 15, 1919.

Melampsoropsis Chiogenes (Dietel) Arthur

On the under sides of leaves of Chiogenes hispidula (L.) A. Gray, Newcomb, Essex county, *H. D. House,* July 18, 1922 and July 2, 1923. Apparently not rare, but easily overlooked, as it was also found at Tahawas, Calamity pond, Indian pass and Chapel pond, all in Essex county, and near Long lake in Hamilton county. The aecial stage is not definitely known, but is probably some unrecognized Peridermium upon the leaves or cones of spruce, although balsam fir occurs in the same localities.

Melampsoropsis ledicola (Peck) Arthur[1]

On the upper surface of leaves of Ledum groenlandicum Oeder, bog at base of Moxon mountain near North Creek,

Warren county, *H. D. House,* July 25, 1923. On the same host, summit of Mount McIntyre, July 13, 1923. At the last named locality dwarfed examples of Abies balsamea and Picea mariana were the only associated conifers.

Melampsorella elatina (A. & S.) Arthur

II–III, on leaves of Stellaria borealis Bigelow (Alsine borealis Britton), Newcomb, Essex county. *H. D. House,* July 22, 1922. The heavily infested clusters (Witches broom) caused by the aecial stage of this rust on the balsam fir (Abies balsamea) are very common about Newcomb, and their abundance suggested a careful search for the alternate stage, known to occur upon species of Alsinaceae. Stellaria borealis was noted to be abundant especially in low places where the balsam fir was often infected, and in July the leaves of the Stellaria were found to be abundantly infected with the telial stage in several places about Newcomb. No infection was found upon Cerastium vulgatum L. The sori on the leaves of Stellaria are very inconspicuous and easily overlooked.

Merulius ochraceus Lloyd[2]

On decayed wood of Betula lutea Michx.f., North Elba, Essex county. *Peck.* Indian pass. *Peck.*

Merulius corium Fries[2]

On dead limbs of Salix nigra Marsh. Albany. *H. D. House,* December 28, 1919. Burt (Ann. Mo. Bot. Gard. 4 : 323. 1917) cites a collection from White Plains, by Underwood.

Micropuccinia conglomerata (K. & S.) Arthur & Kern[1]

In 1920 and 1921 this rare rust was collected in abundance upon the leaves of Petasites palmata (L.) Gray, near Newcomb. On July 20, 1922, it was also found upon the same host at Boreas ponds about 20 miles east of Newcomb.

Micropuccinia porphyrogenita (M. A. Curt.) Arthur & Jackson

Newcomb and Boreas ponds, Essex county, on leaves of Cornus canadensis L. *H. D. House,* July 18 and 20, 1922.

Micropuccinia mesomajalis (B. & C.) Arthur & Jackson

On living leaves of Clintonia borealis (Ait.) Raf., northern end of Indian pass, Essex county, about 2400 feet altitude. *H. D. House,* July 15, 1923.

Micropuccinia recedens (Sydow) Arthur & Jackson

On living leaves of Senecio aureus L., Williamsbridge, New York City. *Percy Wilson 303,* June 2, 1916. Arkville, Delaware county. *Percy Wilson 117,* July 25, 1915. This rust is said to be correlated with Dicaeoma Eriophori (Thum.) Kuntze, which has Senecio aureus as its aecial host, and species of Eriophorum as telial hosts.

Monochaetia Syringae Oudemans

On bark of Syringa vulgaris L., Yates, Orleans county. *Dr C. E. Fairman,* November 1923.

NEMANIA S. F. Gray. Nat. Arr. Br. Pl. 1: 516. 1821

Ustulina Tul. Sel. Fung. Carp. 2: 23. 1863 — Sacc. Syll. Fung. 1: 350. 1882.

The first species (of the twenty-one) enumerated by Gray is Nemania deusta. It is also the first of the species listed which is accompanied by a plate citation. Taken as a whole the generic name Nemania has no more congeneric alignment than Gray's genera Crepidopus, Micromphale and Prunulus, which have recently been resurrected in the Agaricaceae. In considering these generic names of Gray perhaps no safer method can be followed, where they are to be taken up because of their priority, than to adopt the first species enumerated as the type.

Nemania maxima (Haller) comb. nov.

Sphaeria maxima Haller. Nom. Hist. Pl. Helvet. 1769 — Sow. Engl. Fung. *t. 338.* 1801
Sphaeria deusta Hoffm. Veg. Crypt. 1: 3. t. 1. f. 2. 1787 — Pers. Syn. 16. 1801.
Sphaeria versipellis Tode, Fungi Meckl. 2: 55. 1791
Hypoxylon ustulatum Bull. Champ. 1: 176. t. 478. f. 1. 1791
Hypoxylon deustum Grev. Crypt. Fl. 4: t. 324. f. 2. 1825
Nemania deusta S. F. Gray, l. c.
Ustulina vulgaris Tul. Sel. Fung. Carp. 2: 23. t. III. f. 1–6. 1863
Ustulina maxima Schroeter, in Cohn, Kryptofl. Schles. III, 2: 465. 1897.

Frequent throughout New York State on a variety of hosts, but usually on Quercus or Betula.

Nigredo Lilii (G. W. Clinton) Arthur

On seedling leaves of Lilium canadense L., Woodville, Jefferson county. *H. D. House,* June 6, 1923.

Nigredo Scirpi (Cast.) Arthur[1]

Aecial stage on Sium cicutaefolium Schrank, Woodville, Jefferson county. *H. D. House,* June 24, 1921. Telial stage collected at the same locality, September 10, 1921 and September 15, 1922, on Scirpus validus Vahl.

Nigredo seditiosa (Kern) Arthur

On Aristida tuberculosa Nutt., Laurel, Long Island. *Roy Latham,* September 15, 1915 and April 20, 1923.

Nigredo Silphii (Burrill) Arthur[1]

Telial stage on Juncus tenuis Willd. along the Mount Marcy trail at 3500 feet altitude, Essex county. *H. D. House,* August 5, 1921.

NUMULARIOLA gen. nom. nov.

Nummularia Tul. Sel. Fung. Carp. 2: 42. 1861 — Sacc. Syll. Fung. 1: 396. 1882. Not Nummularia (Riv.) Rupp. Fl. Jen. 18. 1745 — Numularia Gilib. Fl. Lithuan. 1: 29. 1781 — S. F. Gray, Nat. Arr. Br. Pl. 2: 300. 1821

In many of the early European treatments of the flowering plants, the Moneywort was known as Nummularia or Numularia, having the same derivation as the fungus genus Nummularia Tulasne. Numularia of Gilbert and S. F. Gray is now usually merged into Lysimachia, but still recognized as of subgeneric rank, was not an invalid name when proposed, and would still be the valid name if that section of Lysimachia should be restored to generic rank.

Numulariola atropunctata (Schw.) comb. nov. (Sphaeria atropunctata Schw., Diatrype atropunctata Berk., Hypoxylon atropunctatum Cooke; Anthostoma atropunctata Sacc.) Found chiefly on dead limbs of Fagus and Quercus in this State.

Numulariola discreta (Schw.) comb. nov. (Sphaeria discreta Schw., Nummularia discreta Tul.) Frequent on dead branches of Malus, Aronia, Amelanchier etc., and on the apple tree regarded as the cause of the "apple blister canker" disease.

Numulariola nummularia (Bull.) comb. nov. (Hypoxylon nummularium Bull. Champ. de Fr. t. 468. f. 4. 1789; Sphaeria Clypeus Schw.; Nummularia Bulliardi Tul.) Frequent on dead limbs of oak, especially Quercus alba L., and occasionally on Fagus grandifolia and other species.

Numulariola repanda (Fries) comb. nov. (Sphaeria repanda Hypoxylon repandum Fr., Nummularia repanda Nitsche, Nummularia pezizoides E. & E.) On dead branches and limbs of Sorbus americana Marsh. North Elba. *C. H. Peck.*

Patellina caesia Elliott & Stansfield

On cone-scales of cultivated Pinus Laricio Poir. lying on the ground and buried by herbage, Ridgeway, Orleans county. *Dr C. E. Fairman,* November 1923.

Peniophora mutata (Peck) Bres.[2]

On decayed limbs of basswood, on ground in woods, near Oneida, Madison county. *H. D. House,* October 20, 1920. Also collected near Albany in 1913 and 1915. Doctor Peck's type was collected at Sevey.

Peniophora velutina (DC.) Cooke[2]

On dead limbs of Salix nigra Marsh., Albany. *H. D. House,* December 21, 1919. The same tree yielded collections of the following:

Peniophora incarnata (Pers.) Cooke
Peniophora cinerea (Fr.) Cooke
Corticium confluens Fr.
Corticium effuscatum C. & E.
Corticium salicinum Fr.
Merulius corium Fr.

Peziza clypeata Schw.[3]

On decayed and water-soaked basswood log in deep woods near Oneida, Madison county. *H. D. House,* September 23, 1922. This was described by Peck (N. Y. State Mus. Bul. 2 : 30. pl. 2. f. 4–6. 1887) as P. orbicularis. A complete account of the species is given by Seaver (Mycologia 8 : 237. pl. 191. 1916).

Phallus rubicundus Bosc.

Greenport, Long Island. *Roy Latham,* March 13, 1921.

Phorcys Xanthoxyli (Peck) House, comb. nov.

Massariella Xanthoxyli Peck. 46th Rep't N. Y. State Mus. 36. 1893

On dead branches of Xanthoxylum americanum L., Mechanicville. *C. H. Peck.* As indicated by Lindau (Engler & Prantl. Nat. Pflanzenfam. 1 : 444. 1897), the generic name Phorcys Niessl. has priority over Massariella Speg. Phorcys

bufonia (Berk. & Br.) Schroter, on Quercus; and P. Tiliae (Curr.) Schroter (Massariella Curreyi (Tul.) Sacc.) on Tilia, are two additional species of this genus found in New York.

Phragmidium americanum Dietel[1]

Newcomb, Essex county, on Rosa blanda Ait. *H. D. House,* August 3, 1921.

Phyllachora Dalibardae (Peck) Sacc.

Newcomb, Essex county, on leaves of Dalibarda repens L. *H. D. House,* July 22, 1922. Present only on the leaves of the preceding season's growth.

Phyllachora Wittrockii (Erikss.) Sacc.

Newcomb, Essex county, on the terminal shoots of Linnaea borealis L., var. americana (Forbes) Rehder. *H. D. House,* July 18, 1922. Very common upon this host in nearly all of the deep swamps about Newcomb during this season. In open places the host seem to be rarely infected by it. The parasitic nature of the fungus causes considerable damage to the host in some places.

Physalacria inflata (Schw.) Peck

Newcomb, Essex county, on decayed log of Acer saccharum Marsh. *H. D. House,* August 3, 1921. Osceola, Lewis county, September 20–22, 1922.

Peck bases the genus Physalacria on Leotia inflata Schw. (Bul. Torrey Bot. Club 9 : 2. pl. IX, figs. 1–5. May 1882). Mr Louis C. C. Krieger (Maryland Acad. Sci. Bul. 3 : 7–8. 1923), after a careful study of the characters of this species, decides that it really belongs to the Agaricaceae, where its nearest relatives are Gloiocephala Massee, and Eomycenella Atkinson. Krieger changes the generic name to Eoagaricus (E. inflatus (Schw.) Krieger, l. c. p. 8), an entirely unnecessary procedure since Leotia inflata Schw. is the type of the genus Physolacria Peck. If the transfer of the species to the Agaricaceae is required, the generic name of which it is the type goes with it, unless there is already in the Agaricaceae a prior generic name with which it is synonymous. There is neither precedent (in modern literature at least) nor rule requiring or permitting a change of generic name under such circumstances.

Poria barbaeformis (B. & C.) Sacc.[4]

Ausable Chasm. *C. G. Pringle 1383,* October 19, 1880.

Poria corticola (Fr.) Cooke[4]

Harrisville, Lewis county, on Acer. *C. H. Peck.* July.

Poria lenis (Karst.) Bres.[4]

Mechanicville, on pine. *C. H. Peck,* October.

Poria nigrescens Bres.[4]

Floodwood, Franklin county, on decayed wood. *C. H. Peck,* August. Fine, St Lawrence county, on Betula lutea Michx. *C. H. Peck,* August.

Poria mucida Pers.[4]

Albany, on decayed log of Betula lutea. *H. D. House,* October 15, 1919 and September 4, 1922.

Poria laevigata Fr.[4]

Newcomb, Essex county, on dead trunk of Prunus serotina Ehrh. *H. D. House,* July 24, 1920.

Poria papyracea Schw.

Newcomb, Essex county, on dead branches and twigs of Thuja occidentalis L. *H. D. House,* August 2, 1921. Determined by Dr L. O. Overholts. Spores elongate, punctate, 10–15 x 3–5 μ; cystidia none; basidia 9–11 μ in diameter.

Poria vitillina (Schw.) Sacc.[4]

Albany, on stump of white pine. *H. D. House,* September 24, 1919.

Porothelium subtile (Schrad.) Fr.[4]

North Elba, Essex county, on spruce. *C. H. Peck.* September.

Prunulus alcaliniformis Murrill (N. Am. Fl. 9 : 331. 1916.)

Among fallen needles under coniferous trees, North Elba. *C. H. Peck,* September 7, 1910. This was described by Doctor Peck in his unpublished notes (30 : 74) under a manuscript name, which was never published. Evidently Doctor Peck considered it too closely related to Mycena subplicosa Karsten, with which he compares it, and from which he says it differs only in its viscid stem and its somewhat closer lamellae. The stem, however, is not conspicuously viscid, as Peck notes, and otherwise his diagnosis of

[4] Determined by Dr James R. Weir.

the North Elba specimens agrees with Murrill's description of Prunulus alcaliniformis. Apparently Murrill's species should be carefully compared with authentic European material of Mycena subplicosa Karsten.

Pucciniastrum Agrimoniae (Schw.) Thum.

Albany, on leaves of Agrimonia parviflora Ait. *H. D. House,* October 14, 1922.

Pucciniastrum americanum (Farlow) Arthur[1]

Collected on Rubus strigosus Michx. at the following localities: Peterboro, Madison county, July 3, 1921; Newcomb, Essex county, August 4, 1921; Tahawas, Essex county, July 14, 1922; Osceola, Lewis county, September 20, 1922.

Rosellinia ligniaria (Grev.) Fckl.

Newcomb, Essex county, on dead bark of Fagus grandifolia Ehrh. *H. D. House,* June 6–10, 1921. This has also been collected at Alcove, Albany county, on Sambucus, by *Shear* (N. Y. Fungi no. 361), and in Orleans county by *Doctor Fairman.*

Sebacina calcea (Pers.) Bres.[2]

On dead limbs of Tsuga canadensis (L.) Carr., near Oneida, Madison county. *H. D. House,* October 15, 1920. Doctor Peck collected it on spruce, at Hague, Warren county, and at North Elba, Essex county. Pringle's no. 1008 (1875) from Vermont, and a collection from Ottawa, Canada, *Macoun,* 1903, also belong here.

Septocylindrium melleum Elliott & Stansfield

On cones of Pinus sp. (cultivated), Lyndonville, Orleans county. *Dr C. E. Fairman,* October 25, 1915.

Septocylindrium strobilinum (Sacc.) Fairman

(Cylindrium strobilinum Sacc., S. leucum Elliott & Stansfield)

On buried cones of Pinus Laricio Poir. (cultivated), Ridgeway, Orleans county. *Dr C. E. Fairman,* November 1923.

Sporoschisma mirabile B. & Br.

On beech and maple firewood, Lyndonville, Orleans county. *Dr C. E. Fairman,* September 19, 1923.

Steccherinum adustum (Schw.) Banker

On decayed limb on the ground in woods, Vernooy kill camp (Potterville), Ulster county. *H. D. House,* August 8, 1922. **Steccherinum septentrionale** (Fries) Banker, was also collected in the same locality by *Dr W. A. Murrill* and *J. A. Kingsbury,* on August 10, 1922, and a portion of the several large imbricated pilei preserved for the state herbarium.

STRICKERIA Korb. Parerga 400. 1865

Teichospora Fckl. Symb. Myc. 100. 1869

The priority of Strickeria Korb. over Teichospora Fckl. has already been indicated by Lindau (l. c. p. 416) as well, as by Kuntze. The following species are known to occur in New York:

Strickeria Chevalierii (Karsten) comb. nov. (Teichospora Chevalierii Karsten), see page 72.

Strickeria elliptica (Peck) comb. nov. (Teichospora elliptica Peck).

Strickeria interstitialis (C. & P.) Kuntze

Strickeria obducens (Fr.) Winter

Strickeria phellogena (B. & C.) Kuntze

Strickeria praeclara (Rehm) comb. nov. (Teichospora praeclara Rehm, Ann. Myc. 4: 336. 1906), on bark of Ostrya virginiana, Lyndonville. *Dr C. E. Fairman.*

Strickeria trimorpha (Atkinson) comb. nov. (Teichospora trimorpha Atkinson), on bark and dead branches of Populus, Ithaca. *Atkinson.*

Telimena Elymi Orton

On leaves and culms of Elymus virginicus L. North Bay, Oneida county. *H. D. House,* October 13, 1915. Determined by Doctor Orton.

Trematosphaeria caryophaga (Schw.) Sacc.

Sphaeria caryophaga Schw. Syn. Am. Bor. No. 1594 Trans. Am. Phil. Soc. 4: 1834 — Sacc. Syll. 2: 412. 1883 — Cooke, Grevillea 18: 60. 1890
Sphaeria nuclearia DeNot. Micr. Ital. 9: 462. f. 4. 1857
Hypoxylon nucitena B. & C. N. Am. Fungi no. 844.
Melanoma ? nucitena Sacc. Syll. Fung. 2: 103. 1883
Trematosphaeria nuclearia (DeNot.) Sacc., Syll. 2: 121. 1883

On old or partially decayed nuts of Hicoria ovata. Albany. *H. D. House 165,* May 14, 1924. Vaughns, Washington county. *Burnham,* 1913. Orient, Long Island. *Latham,* May 1, 1923.

Tremella vesicaria Bull.

Figure 1

On ground in open woods among fallen decayed leaves and growing grass. Vernooy kill camp (Potterville), Ulster county. *H. D. House,* August 9, 1922.

The varying forms which this plant assumes seem to have been the cause of much confusion. Farlow, Overholts, Lloyd and Burt have described it under various names. The first collection made at Potterville on August 9th, was an exact match for Lloyd's Tremella sparassoidea.[5] Upon my request Bertha Empt of Vernooy kill camp sent me later in the month (August 30th) from the same spot, an additional collection, which matches Lloyd's description of Tremella vesicaria,[6] and which was photographed and is here illustrated.

The history of the fungus in America is anything but clear. Berkeley[7] first described it briefly as Corticium tremellinum var. reticulatum. I believe that the expression "reticulated below" as used by Berkeley in this diagnosis has been misunderstood by Lloyd, who says that the plant is not reticulated below. The expression used by Berkeley evidently refers to the common feature of the confluent lobes, which in some plants is especially noticeable toward the base, and which gives them a sponge-like appearance. In other plants, usually small ones, the lobes are more or less free and broadly clavate. In all specimens the lobes are hollow above, but somewhat spongy within toward the base. Farlow[8] took up Berkeley's name and called the plant Tremella reticulata.

In the state herbarium are collections made by Doctor Peck[9] at three or four widely separated localities, which he referred to Tremella vesicaria Bulliard. Doctor Peck later changed his identification of these plants to Tremella fuciformis Berk. As has been lately noted by Burt,[10] Tremella fuciformis is a smaller and more southern species.

Lloyd, in 1908,[11] described what is apparently the same thing under the name of Tremella clavarioides. This form is well represented by at least three collections in the state herbarium, which must have been here at the time of Lloyd's visits. They are from Albany, *Peck;* Bethlehem, *C. C. Nichols;* and

[5] Lloyd. Tremella sparassoidea. Myc. Writ. 6: (Myc. Notes 61. page 894. pl. 135. f. 1562.) 1920.

[6] Lloyd. Tremella vesicaria Myc. Writ. 6: (Myc. Notes, p. 871. f. 1486.) 1919.

[7] Berkeley. Corticium tremellinum var. reticulatum. Grevillea I: 180. 1873.

[8] Farlow. Rhodora 10: 9. 1908.

[9] Peck. Tremella vesicaria Bull. 28th Rep't N. Y. State Mus. 53. 1879.

[10] Burt. Tremella reticulata. Ann. Missouri Bot. Gard. 8: 364. 1921.

[11] Lloyd. Tremella clavarioides. Myc. Writ. 3: (Myc. Notes, Old Species Series 1: 10. text fig. 224.) July 1908.

Oneida, *H. A. Warne*. Lloyd states,[12] however, "nor did I find it in Peck's Museum." This doubtless refers to the state herbarium in Doctor Peck's charge, since it is unknown that Dr Peck ever possessed a museum.

Tremella sparassoidea is described by Lloyd[5] from Minnesota, and also from a collection made in Pennsylvania by Overholts.[13] This is an extreme form of the species with numerous spinelike outgrowths on the tops of the hollow, clavate branches. Fresh plants at Vernooy kill camp showed this condition beautifully. The next day, following a heavy rain, and also on plants 2 or 3 days old, these spinelike processes had disappeared entirely in some cases, and to a large extent in all of the other older plants examined which had passed through the rainstorm or were rather old.

From these observations I am inclined to believe that Tremella clavarioides, T. sparassoidea and T. reticulata all represent forms or conditions of the same species, which is the same conclusion reached by Doctor Burt. Whether Tremella vesicaria Bulliard, is the correct name for our plant I do not know. Lloyd says that Bulliard's figure is not our plant. I am disposed to refer it there until our plant has been compared with European specimens. Lloyd[6] also ventures the opinion that Guepinia helvelloides Schw. is the same species and under the pseudonym "McGinty" makes the new combination Tremella helvelloides.

Uredinopsis mirabilis (Peck) Magnus

II–III on Onoclea sensibilis L., Newcomb, Essex county. *H. D. House,* July 22, 1922. The aecial stage, Peridermium balsameum Peck, on the leaves of Abies balsamea is common in this region and is to be found in nearly every thicket and swamp where the hosts are found in association.

Uredinopsis Osmundae Magnus

II–III on Osmunda Claytoniana L., Newcomb, Essex county. *H. D. House,* July 22, 1922. Osceola, Lewis county, and Alder Creek, Oneida county, on Osmunda regalis L.

Urocystis Waldsteiniae Peck

Woods south of New Salem, Albany county, on leaves of Waldsteinia fragarioides (Michx.) Tratt. *H. D. House,* May 27, 1922.

Ustilago residua Clinton

On Danthonia spicata (L.) Beauv., Elk park, Catskill mountains. *Dr L. H. Pennington,* June 25, 1914.

---

[12] Lloyd. Mycological Notes 62, page 920, pl. 145. f. 1646. 1920.

[13] Overholts. Tremella sparassoidea. Mycologia 12: 141. pl. 10. fig. 3, 1920.

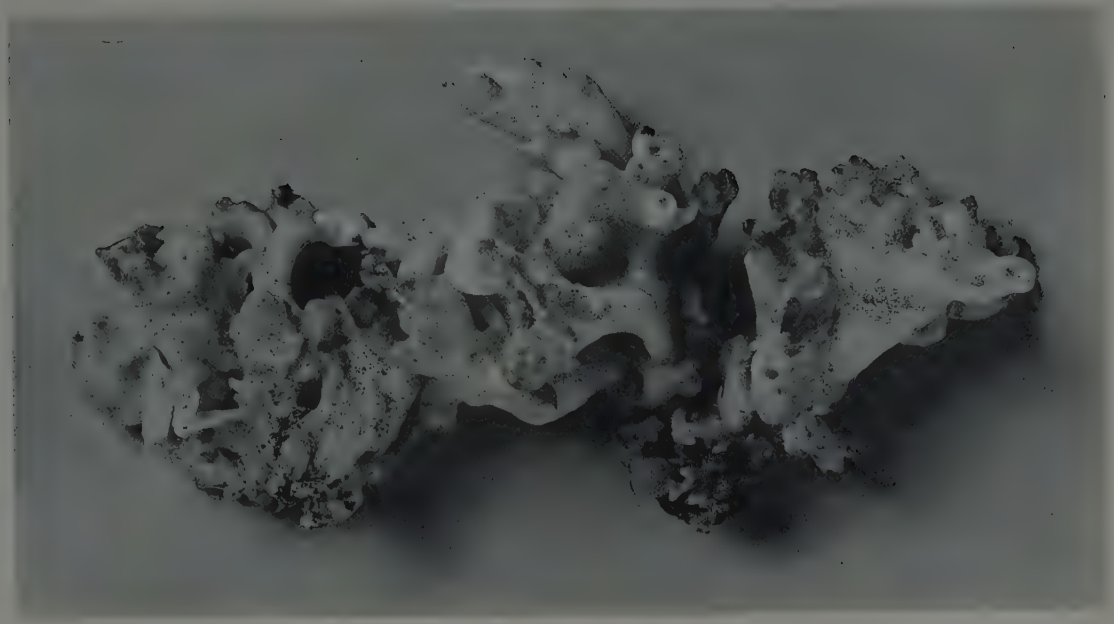

Figure 1 TREMELLA VESICARIA Bulliard
From specimens collected at Vernooy kill camp, Potterville, Ulster county, August 9, 1922

NEW OR NOTEWORTHY SPECIES OF FUNGI, IV

BY

JOHN DEARNESS AND HOMER D. HOUSE

Among the species here noted, the following are described as new species or varieties:[1]

Acrospermum cuneolum
Belonidium Spiraeae
Cenangium griseum
Cylindrosporium fraxinicolum
Dendrophoma Azaleae
Diplosporium flavidum
Diplosporium Polypori
Dothidella caricina
Gnonomia setacea var. Caryae
Helicia buccina
Helminthosporium naviculatum
Helminthosporium Phomatae
Leptosphaeria borealis var. Populi
Leptostroma Allii
Leptostromella Angelicae
Leptostromella Mali
Leptothyrella Aceris
Lophodermium Oxycocci var. hypophyllum
Macroplodia Clematidis
Macroplodia juglandicola
Micropeltis Viburni
Melanconiella subviridis
Melanconis subviridis
Myxosporium Liriodendri
Nectria episphaeria var. minor
Ombrophila setulata
Phyllachora Melicae
Placosphaeria Baccharidis
Pleospora herbarum var. Triglochinis
Pseudographis Phragmitis
Rhabdospora Polygoni
Scopaphoma Corioli
Septomyxa grisea
Sphaerographium niveum
Tympanis Cephalanthi

The following species of fungi, have not, so far as we are able to ascertain, been previously reported from New York State:

Acrothecium melanoplus (Schw.) Sacc.
Amphisphaeria applanata (Fr.) Ces. & DeNot.
Anthostoma amplispora (Cke.) E. & E.
Beloniella brevipila (R. & D.) Dearn. & House
Botrydiplodia Celastri (Cke.) Sacc.
Cercospora avicularis Winter
Cercospora omphacodes E. & E.
Ciboria firma (Pers.) Fckl.

[1] Unless otherwise stated, the types of new species herein described, and the specimens otherwise reported upon, are in the herbarium of the New York State Museum.

Dendrophoma Syringae Dearn.
Didymosphaeria Linderae Sacc.
Durella minutissima Rehm.
Exoascus Farlowii (Sadeb.) Sacc.
Heterosphaeria Linariae (Rabh.) Rehm
Leptostroma Abietis Rostr.
Lophodermium Abietis Rostr.
Lophodermium tumidum (Fr.) Rehm
Macrophoma dryina (B. & C.) Berl. & Vogl.
Macroplodia simillima (Peck) Dearn. & House
Macrosporium Martindalei Ell. & Mart.
Melanconium parvulum Dearn. & Barth.
Metasphaeria microecia E. & E.
Metasphaeria subcutanea (C. & E.) Dearn. & House
Microdiplodia Linderae (E. & E.) Dearn. & House
Ophiobolus filisporus (C. & E.) Sacc.
Otthiella staphylina (E. & E.) Dearn. & House
Patellaria nigrovirens Sacc. & Ell.
Phacidium Populi Lasch
Phoma glandicola Desm.
Phoma nervisequa Sacc.
Phyllachora Oryzopsidis Theiss. & Sydow
Pleospora scabra Mont.
Pleospora vagans Niessl.
Pyrenopeziza compressula Rehm
Ramularia Chamaenerii Rostr.
Septoria alnifolia E. & E.
Septoria Commonsii E. & E.
Septoria Sii Rob. & Desm.
Taphrina Johansonii Sadeb.
Teichospora Chevalierii Karst.
Tubercularia Ailanthi Cke.

In addition the following species, collected during 1917–18, in Panama, by Ellsworth P. Killip, are either described or briefly noted:

Asterina Killipii, sp. nov.
Glomerella cingulata (Stonem.) Spaulding & Von Schrenk
Guignardia Pleurothallis, sp. nov.
Leptostromella Andropogonis, sp. nov.
Leptostromella septorioides Sacc. & Roum.
Macrophoma Pernettyae, sp. nov.
Meliola Cookeana Sacc.
Pestalozzia Gaultheriae, sp. nov.

MYXOGASTRALES

Didymium melanospermum (Pers.) Macbr. var. **minus** (Lister) Dearness & House, comb. nov.

Didymium minus Lister. Jour. Cinc. Soc. Nat. Hist. 61. t. XII, f. 39. 1894

Newcomb, Essex county, on Chiogenes hispidula (L.) Gray, and other low forms of vegetation on the ground in swamps. *H. D. House,* August 10, 1921, September 1922.

Badhamia utricularis (Bull.) Berk.

Averyville marsh, North Elba, Essex county. *D. M. White,* on Carex strictior Dewey, July 28, 1917.

Dictydiaethalium plumbeum (Schum.) Rost.

On dead branches of Robinia pseudoacacia L. Albany. *H. D. House,* November 17, 1919.

Leocarpus fragilis (Dickson) Rost.

Newcomb, Essex county, attached to various kinds of vegetation on ground in swamps, especially on Vaccinium Oxycoccus L. *H. D. House,* July 25, 1920.

PHYCOMYCETES

Albugo Tragopogonis (DC.) S. F. Gray

Tahawas, Essex county, on leaves of Cirsium muticum L. *H. D. House,* July 14, 1922.

ASCOMYCETES

Exoascus Farlowii (Sadeb.) Sacc.

Newcomb, Essex county, on immature fruit of Prunus serotina Ehrh. *H. D. House,* June 7, 1921. On the same host, Fourth lake, Herkimer county, August 8, 1919.

Taphrina Johansonii Sadeb.

On pistillate aments of Populus alba L., Woodville, Jefferson county. *H. D. House,* June 6, 1923. Some of the asci in the Woodville collection have a rather long immersed portion (one was measured 63 μ) and there is some question owing to the inability to consult certain literature, whether this should not be referred to Taphrina rhizophora Johans.

Vibrissea truncorum (A. & S.) Fries

Avalanche lake, Essex county, on spruce log partially immersed and wholly water soaked. *H. D. House,* June 30, 1923. The variety albipes Peck, seems to have merely a shorter, whiter stem than the typical form of the species, and was collected at Newcomb, July 5, 1923.

Melachroia xanthomela (Pers.) Boud.

Newcomb, Essex county, on much decayed log in woods. *H. D. House,* September 30, 1922.

Ciboria firma (Pers.) Fckl.

On chips of Betula lutea Michx. f., in ravine at the southern base of Peaked mountain, Washington county. *S. H. Burnham,* June 9, 1918. Determined by Dr F. J. Seaver.

Trichopeziza myricacea (Peck) Sacc.

On dead twigs of Myrica Gale L., Newcomb, Essex county. *H. D. House*, June 22, 1923. The type of this species was collected by Doctor Peck on the same host at North Elba. The Newcomb material contains also some Metasphaeria myricae Peck, the only other collection in this State being the type specimens collected by Peck at Caroga. On the Newcomb material is also Diaporthe phomaspora (C. & E.) E. & E., which has also been once collected in this State by Doctor Peck at North Elba, and reported as D. Wibbei.[1]

Pezizella Lathyri (Desm.) Shear & Dodge[2]

The conidial stage, Hainesia Lathyri (Desm.) von Hohn. on living leaves of Steironema ciliatum (L.) Raf., Sylvan Beach, Oneida county. *C. H. Peck.* The pycnidial stage, Sclerotiopsis concava (Desm.) Shear & Dodge (Leptothyrium macrothecium Fckl.) on fallen leaves of Quercus ilicifolia Wang., Karner, Albany county. *C. H. Peck.* (The exact date of Doctor Peck's collections of this material is unknown.)

Ombrophila setulata Dearness & House, sp. nov.

Erumpent, .3–1.5 mm, horny when dry, gelatinous when moist, solitary, scattered, exceptionally two or three in a cluster, substipitate or merely contracted to a narrow base; exciple leather-brown, involute when dry, prosenchymatous, the cells contracted into fascicles at the margin, terminating into acuminate, brown, four-six-septate setae, 60–100 μ long and 10–12 μ thick at the base; disc gray, plane when moist; asci cylindric-clavate, obtuse, tips blue with iodine, 95–130 x 12μ; paraphyses linear, hyaline, somewhat enlarged at the tips; sporidia hyaline, continuous, 12–18 μ long, mostly over 16 x 7 μ, many of them with a nucleus filling each end and leaving a granulated zone that simulates a septum.

Newcomb, Essex county, on dead twigs of Acer spicatum Lam. *H. D. House*, June 8, 1922.

Belonidium Spiraeae Dearness & House, sp. nov.

Ascomata gregarious, dark brown or black, 1–1.25 mm broad at the top when mature, .75 mm high, erumpent, closed globose at first, then turbinate, margin remaining incurved, becoming stellate or lacerate, ridged-rugose; cells of the ectothecium brown, elongate, many of them about 15 x 3 μ. Asci cylindric or somewhat larger toward the top, not blue with iodine, 60–75 x 7–8 μ; paraphyses

[1] New York State Mus. Bul. 197: 28. 1918.
[2] Mycologia 13: 135–70. pl. 8–10. 1921.

filiform, abundant. Sporidia hyaline, almost linear, wider above, three-septate, 15–27 x 2.5–2.75 μ.

On dead stems of Spiraea latifolia Borkh. Indian pass, Essex county, 3000 feet altitude. *H. D. House,* July 15, 1923 (type). Newcomb, Essex county, June 5, 1922 and July 1, 1923. On dead stems of Opulaster opulifolius (L.) Kuntze, London, Ontario. *J. Dearness.*

Belonidium Macounii Dearness, on Spiraea Menziesii, has an entire margin, and larger asci and sporidia. As seen under the lens the ascomata of the two species appear quite different.

Beloniella brevipila (Rob. & Desm.) Rehm

(Trichopeziza brevipila Sacc.; Pirottaea brevipila Boud.)

Newcomb, Essex county, on dead stems of Solidago humulis Pursh (S. uliginosa Nutt.). *H. D. House,* June 9, 1922. Some of the asci are two-spored, others four-spored; sporidia one to eight-septate and 25–36 x 3 μ.

Pyrenopeziza compressula Rehm

Sandlake, Rensselaer county, on dead stems of Thalictrum canadense Mill. (T. polygamum Muhl.). *C. H. Peck.* A portion of this material was sent to Saccardo a few years ago as no. 88, and determined by him as Pyrenopeziza Thalictri (Peck) Sacc. Reexamination of the portion retained here shows that it has spores mostly 6–7 x 2–3 μ, and does not seem to conform to Saccardo's determination.[3] The host was erroneously stated to be Thalictrum purpurascens.

Pyrenopeziza subatra (Cooke & Peck) Sacc.

Woodville, Jefferson county, on dead stems of Decodon verticillata (L.) Ell. *H. D. House,* June 21, 1922.

Durella minutissima Rehm

Albany, on decorticated and dead branches of Prunus serotina Ehrh. *H. D. House,* December 28, 1919.

Patellaria nigrovirens Sacc. & Ell.

Albany, on decorticated and dead stems of Cornus stolonifera Michx. *H. D. House,* April 3, 1923. Most of the apothecia

[3] New York State Mus. Bul. 197: 49. 1918.

here would be taken for Patellina, but a few mature ones show it to be a Patellaria, and from the description it is referred to P. nigrovirens. The same material also contains Valsa cornina, and a form of Hysterographium Mori (Schw.) Rehm.

Cenangium griseum Dearness & House, sp. nov.

Gregarious, erumpent, sessile, ½–2 mm, clothed externally with a pale gray furfuraceous covering; disc pale brown, concave; asci cylindrical stipitate, not blue with iodine, p. sp. 85–90 x 8–12 μ; paraphyses longer than the asci, tips thickened, agglutinated, forming an epithecium; sporidia 8, hyaline, uniseriate, elliptic, very minutely asperate, 10–15 μ, mostly about 12 x 7–10 μ.

On dead branches of Acer spicatum Lam., Newcomb, Essex county. *H. D. House,* June 6, 1922. Cenangium bicolor (Ell.) Sacc., also on Acer, differs in having a darker disc and much narrower spores.

Godronia Cephalanthi (Schw.) Dearness & House, comb. nov.

Peziza Cephalanthi Schw. Syn. Fung. Carol. n. 1256. 1822
Cenangium Cephalanthi Sacc. Syll. 8: 571. 1899 — ? Fries, Syst. Myc. 2: 188. 1822

Saccardo in compiling Cenangium Cephalanthi had only the incomplete account of Fries. The study of a collection in mature fruit enables us to add the following characters:

Asci clavate, 63–75 x 8–10 μ; paraphyses linear, longer than the asci, concolorous at the tips and somewhat thickened; sporidia linear, narrowly clavate, hyaline, five to eight-septate, 30–65 x 3 μ.

On the character of the mature fruit this is referred by us to Godronia. The brief description by Fries applies perfectly as far as it goes, to the material here cited. The plants are erumpent and have a thin, brown, short-celled perithecium which in mature, dry specimens is as stated by Fries, "lacero involuto." In the bright colored disc, branched paraphyses and filiform sporidia, some of the immersed units suggest Naemacyclus. It is left, however, in the dermataceae where Fries and Doctor Peck classified it, although it lacks the usual firmness of that order.

Karner, Albany county. *C. H. Peck.* West Albany. *Peck.* Greenbush, Rensselaer county. *C. H. Peck,* all on Cephalanthus occidentalis L. There is also a specimen from Alabama collected by Peters in the collection received by Doctor Peck from M. A. Curtis.

Godronia Nemopanthis (Peck) Sacc.

On dead branches of Nemopanthus mucronata (L.) Trel. Newcomb, Essex county. *H. D. House,* June 20, 1923. On the same collection is also found Sphaeronema Peckii Sacc. (S. caespitosa Peck, not Fckl.)

Pezicula cinnamomea (Phill.) Sacc.

This is the same as Dermatea cinnamomea Cooke & Peck, and Pezicula eximia Rehm. Doctor Peck's description is incomplete with respect to the spore measurements. He gives them as .0005 in. whereas they are over 30 μ. One was measured 36 x 18 μ. In the herbarium Doctor Peck later referred his Sandaken collection (type of Dermatea cinnamomea C. & P.) to Pezicula cinnamomea (Phill.) Sacc., and also at another time to Ocellaria aurea, which has asci 160 μ long, and is referable to Ocellaria ocellata (Pers.) Seaver[4], while Pezicula cinnamomea has asci 115–20 x 25–28 μ.

On dead branches of Populus grandidentata Michx. Newcomb, Essex county. *H. D. House,* July 1, 1923. East Springbrook near London, Ontario. *Dearness,* July 1912 (type of P. eximia Rehm). Sandaken. *C. H. Peck.* On Populus tremuloides Michx. Charlton. *C. H. Peck.*

Tympanis Cephalanthi Dearness & House, sp. nov.

Apothecia black, in clusters of two to four, arising from a thin stroma in the basal stratum of the cortex of the host, cespitosely erumpent through the cuticle, nearly plane, .4 mm wide, .35 mm high, with or in a group of somewhat similar pycnidia. Asci very regularly truncate-clavate, 45–60 μ long, 8 μ across the flat tip, 10–12 μ thick at the broadest part, the upper half crowded with minute sporidia, ascus pore not staining blue with iodine, paraphysate. Sporidia very numerous, minute, hyaline, allantoid, 3–4 x .5–1 μ.

Karner, Albany county, on dead twigs of Cephalanthus occidentalis. *C. H. Peck* (same type material as Dendrophoma Cephalanthi Peck).

Most of the units in each group and most of the groups entirely are pycnidia of the Dendrophoma, filled with remarkably much branched conidiophores bearing conidia indistinguishable in size and shape from the conidia of Dendrophoma Cephalanthi Peck,[5] which is seemingly what Doctor Peck described,

[4] Mycologia 3: 65. 1911.

[5] Dendrophoma Cephalanthi Peck, 39th Rep't N. Y. State Mus. 45. 1886.

while he overlooked the associated Tympanis. It may also be assumed that the Dendrophoma is the conidial stage of the Tympanis here described.

Tympanis turbinata (Schw.) Sacc.

On dead stems of Viburnum alnifolium Marsh. Newcomb, Essex county. *H. D. House,* July 4, 1923. On dead stems of Diervilla Diervilla (L.) MacM. Karner, Albany county. *C. H. Peck.* On Viburnum cassinoides L. Babylon, Long Island. *D. H. House.* Neither Peck nor Saccardo give any measurements for this species. The asci are clavate, 75 x 6 μ, and the sporidia are 2 x ½ μ.

Holwaya gigantea (Peck) Durand

The conidial stage, Stilbum giganteum Peck, on decayed log of Liriodendron Tulipifera L., Oneida. *H. D. House,* September 16, 1922.

Propolidium fuscocinereum E. & E.

(Cryptodiscus angulosus Karst.)

Conidial stage, on dead branches of Salix nigra L., Albany. *H. D. House,* December 28, 1919.

Heterosphaeria Linariae (Rabh.) Rehm

Albany, on dead stems of Linaria Linaria (L.) Karst. *H. D. House,* May 19, 1922.

Phacidium Populi Lasch

The type of Phoma Populi Peck[6] (1887) is from Elizabethtown, on fallen leaves of Populus tremuloides Michx. On a collection from the same region made by Doctor Peck, on leaves of Populus grandidentata Michx. and reported by him as Phyllosticta bacteriiformis (Pass.) Sacc. is found the same kind of spores, and while not in good fruit is evidently the same as his Phoma Populi. The European type of Phyllosticta bacteriiformis may be quite distinct. Phyllosticta maculans E. & E.[7] and Septoria rhabdocarpa E. & E. are identical and all belong to Dendrophoma.

[6] 40th Ann. Rep't N. Y. State Mus., 59. 1887 — Macrophoma Populi (Peck) Fl. Tassi, Bul. Lab. ed. Orto bot. Siena 18. 1902.

[7] Proc. Acad. Phila. 1893: 157. 1893.

The interesting fact in connection with this is that in the type material of Doctor Peck's Phoma Populi, in some of the same perithecia is found a Phacidium, which so far as the description goes is referable to Phacidium Populi Lasch. The asci are about 30 x 8 μ, fairly large for Phacidium, and the other characters are satisfactory for the species.

The Phoma described by Doctor Peck is without doubt the conidial stage and may be designated as **Dendrophoma Populi** (Peck) Dearness & House, comb. nov. Doctor Seaver[8] retains the name Phyllosticta maculans E. & E. for this species, with Peck's prior name, Phoma Populi, given as a doubtful synonym.

Coccomyces comitialis (Batsch) Dearness & House, comb. nov.

Peziza comitialis Batsch. Elench. Fung. Cont. 1: 217. t. 27, f. 152. 1786 — Sowerby, Fung. t. 118. 1797
Peziza viridis Bolton. Fung. t. 109. f. 1. 1789
Xyloma pezizoides Pers. Syn. Fung. 105. 1801
Ascobolus coronatus Schum. Saelland. 2: 437. 1803
Phacidium coronatum Fries. Obs. Myc. 1: 167. 1815
Coccomyces coronatus DeNot. in Erb. Critt. Ital. 1. no. 236.

On fallen leaves of Fagus grandifolia Ehrh. Croghan, Lewis county. *C. H. Peck* (reported as Hysterium tumidum Fr.); same host, East Berne, Albany county. *C. H. Peck;* North Elba, Essex county. *C. H. Peck.* On fallen leaves of Betula lutea Michx., North Elba. *C. H. Peck.* On fallen leaves of Quercus alba L. Oneida. *H. D. House.*

Lophodermium Abietis Rostr.

(Snyltesvampe Danmarks p. 17. 1889)

Newcomb, Essex county, on fallen leaves of Picea rubens Sargent, and less frequently on Picea mariana (Mill.) B.S.P. *H. D. House,* June 6, 1922. Similar to Lophodermium pinastri, but smaller, no ascus seen which measured over 105 μ in length. The spermogonial form, Leptostroma Abietis also present on some leaves; its sporules 2–3 x ½ μ.

Lophodermium Oxycocci (Fr.) Karst.

var. **hypophyllum** Dearness & House, var. nov.

A minute Lophodermium found on the leaves of Oxycoccus Oxycoccus (L.) Pers., at Tahawas, Essex county. *H. D.*

[8] N. Amer. Flora 6: 26. 1922.

House, August 4, 1921. It agrees with the features set forth in the incomplete description given by Fries,[9] except that in these specimens the fungus is strictly hypophyllous; the asci are 50–70 x 6 μ, and are overtopped by the club-shaped paraphyses. As a matter of record it may be placed for the present as a variety of L. Oxycocci.

Lophodermium sphaerioides (A. & S.) Duby

(Hypoderma sphaerioides Kuntze)

On languishing and fallen leaves of Ledum groenlandicum Oeder. North Creek, Warren county. *H. D. House,* June 25, 1923.

Lophodermium tumidum (Fr.) Rehm

(Hysterium tumidum Fr.; Coccomyces tumidus DeNot.)

A very conspicuous fungus, almost everywhere present in the Adirondack region, on dead fallen petioles of Sorbus americana Marsh. Indian pass, 3000 feet altitude. *H. D. House,* July 2, 1923. Calamity pond, June 20, 1923. Newcomb, June 28, 1923. Edmonds ponds (Cascade lakes). *C. H. Peck* (identified by Peck as Lophodermium petiolicolum (Fr.) Fckl.)

Hypoderma strobicola Tubeuf[10]

Parasitic on the living and languishing needles of Pinus rigida Mill. near New London, Oneida county. *H. D. House,* June 28, 1921. The sporidia are 20–27 x 3.5–5 μ, and surrounded by a gelatinous envelop 28–33 x 10–15 μ. On needles of Pinus Strobus L., Roslyn, Long Island. *J. J. Levison,* December 1, 1916.

Hypoderma rufilabrum (B. & C.) Duby

Newcomb, Essex county, on dead twigs of Acer spicatum Lam. *H. D. House,* June 20, 1923.

Pseudographis Phragmitis Dearness & House, sp. nov.

Apothecia scattered, erumpent, externally black and rugulose, at first perforate, then widely gaping, white-rimmed around the mouth,

[9] Fries. Syst. Myc. 2: 588. 1823.

[10] Lophodermium brachysporum Rostr. Tids. Skoobrug 6: 251. 1883. Hypoderma brachyspora Tubeuf, 1895. Not Spegazzini, 1887.

250 μ in diameter at the base, 150 μ high. Asci subcylindrical, mostly reducing in size toward the summit, 60–70 x 10 μ paraphysate; sporidia three septate, hyaline, rounded at both ends, uniformly narrowing from base (3½–5½ μ wide) to summit (2½–3 μ wide), and 16–27 μ in length.

On dead culms of Phragmitis Phragmitis (L). Karst., Long Beach, Long Island. *H. D. House,* May 10, 1922.

Acrospermum cuneolum Dearness & House, sp. nov.

Perithecia thickly scattered, particularly in the angles of the branchlets, erumpent, dark brown, wedge-shaped; edge 170 μ thick at base, 50 μ at top, side 600–50 μ long, 300 μ wide, concentrically ridged. Asci various in length, up to 550 μ, 6–7 μ in width, some of them elongated to 50–80 μ below the sporidia; paraphyses filiform. Sporidia smoky hyaline in mass, filiform, various in length, the longest ones measuring over 500 μ in length by 1 μ in thickness.

On dead twigs of Acer spicatum Lam. Newcomb, Essex county. *H. D. House,* June 8, 1922.

Ostropa mellea Dearness & House, sp. nov.

Apothecia scattered, sparse, seated in the decorticated wood, externally white, furfuraceous, melleus or salmon-colored in the center of the disc, the stroma and dark part of the perithecial wall concealed, the exposed cushion circular, .5–.75 mm in diameter, rising .25–.28 mm above the wood. Asci linear-cylindrical, 300–500 x 6–9 μ, exceeded 20–60 μ by the linear paraphyses which are 1–1½ μ thick. Conidia filiform, nearly as long as their containing asci, multiseptate, the septation made plain by staining, 1 μ thick.

On decorticated wood of Platanus occidentalis L. Charlotte, Vermont. *C. G. Pringle* 490. 1880.

PYRENOMYCETES

Dimerosporium balsamicola (Peck) E. & E.

Newcomb, Essex county, on dead leaves of Abies balsamea (L.) Mill. *H. D. House,* June 12, 1921.

Meliola Cookeana Sacc.

On leaves of Solanum sp. Orange river valley near Juan Diaz, Panama. *E. P. Killip,* November 11, 1917. Appendages few, 200 x 10 μ, apex entire. A form on Bradburya angustifolia (H. B. K.) Kuntze, collected by Killip on the upper Juan Diaz river, Panama, October 23, 1917, is apparently the same species; the

spores are the same shape and size, but the perithecia seem less mature.

Asterina Killipii Dearness & House, sp. nov.

Perithecia hypophyllous, shield dimidiate, radiate-fimbriate edged, reaching 360 μ in diameter, in a reticulate, brown mycelium of anastomosing hyphae 5–6 μ thick, many of the strands opposite the middle of the mesh bearing a globular enlargement 20–25 μ thick. Asci eight-spored, flabby, various in shape and size, subovate to irregularly cylindric, 40–90 x 12–20 μ. Sporidia hyaline, irregularly oblong, 12–16 x 5–7 μ.

On languishing or dead leaves of Erythrodes Killipii Ames (Orchidaceae). Camp 1, Holcomb's trail, El Boquete, Panama, 1650 meters altitude. *E. P. Killip,* February 15, 1918. Many of the perithecia of the type material will be found in imperfect condition for study.

Micropeltis Viburni Dearness & House, sp. nov.

Perithecia membranous, scattered, sometimes very thickly so, hypophyllous, circular, dimidate, brown, opening lacerately or stellately in 3 to 6 triangular sections but remaining incurved, 85–175 μ in diameter. Asci cylindric to subclavate, sessile, 45–60 x 8–10 μ, paraphyses linear, not abundant, about the length of the asci. Sporidia hyaline, mostly biseriate, subacute at both ends, three-septate, 15–18 x 4 μ.

On dead leaves of Viburnum cassinoides L., hanging on the living twigs, Newcomb, Essex county. *H. D. House,* June 23, 1923.

Attention was attracted to several shrubs of the Viburnum growing in a swamp, the ends of all of the new shoots covered with leaves of the present season's growth which had apparently died and turned brown or almost black, just before reaching maturity. Their general appearance was similar to what might be expected as the result of a late frost, but there was no indication in the surrounding vegetation, which included some ferns which are very sensitive to light frost, that such a frost had occurred. If such a frost had occurred one would scarcely expect to find so soon afterward a secondary or saprophytic fungus coming to maturity on the leaves (June 23d). The dead leaves bear on the upper side numerous minute, sterile pycnidia, which if related to the Micropeltis, that relationship could not be established. It seems likely that the death of the leaves was due to the mycelium represented by these minute sterile pycnidia or to the Micropeltis described above.

Nectria episphaeria (Tode) Fries

A blood-red Nectria on Eutypella on beech, collected by Peck at Morehouseville, but unnamed, possesses the essential characters of Nectria episphaeria, but is smaller in every way than the measurements given in the description of the usual form. The perithecia are mostly under 100 μ in diameter; the asci 45 μ instead of 60 μ long, and the sporidia 7 x 4 μ, instead of 9–12 x 4–6 μ. It may stand for the present as var. **minor** Dearness & House, var. nov.

Thyronectria Xanthoxyli (Peck) E. & E.

On dead branches of Xanthoxylon americanum L. West Troy. *C. H. Peck,* October 1898 (type). This has been merged by Seaver[11] into T. pyrrhochlora (Auers.) Sacc. It has, however, certain distinctive characters, including smaller cespitose perithecia in smaller and less immersed stroma, which makes this disposition of the species open to question.

Balansia Hypoxylon (Peck) Atkinson[12]

On leaves of Spartina Michauxiana Hitchc. Lewis Point, Madison county. *H. D. House,* August 20, 1918. The ascigerous cells are 360 μ long; the longest asci about 270 μ long; spores nearly as long and .7 μ thick. Doctor Peck collected the type of this species at Sandlake, Rensselaer county, on Danthonia spicata (L.) Beauv.

Claviceps purpurea (Fr.) Tul.

Sclerotia on the inflorescence of Spartina alterniflora Loisel., Long Beach, Long Island. *H. D. House,* October 20, 1923. Some of the sclerotia are over 2 cm long.

Dothidella caricina Dearness & House, sp. nov.

Stromata black, covered at first by the blackened epidermis and strongly suggesting a small form of Phyllachora graminis; .15–1.5 mm in length, .15–.4 mm in width, containing one, two or three ascigerous cells, sometimes more (eleven was the largest number observed in a single stroma); ostiola black, shining, sulcate, about 50 μ in height, and of the same width, rupturing the lower, that is, the outer surface of the leaves and sheaths; asci narrowly clavate, 60–75 x 7–8 μ, eight-spored, paraphysate; sporidia hyaline, uniseptate, partially biseriate, usually nucleate and slightly curved on one side, 11–18 μ long, mostly about 15 x 3 μ.

[11] Mycologia 1: 203–4. 1909.
[12] Journal of Mycology 11: 254. 1905.

On languishing and dead leaves and sheaths of Carex laevivaginata (Kukenth.) Mackenzie, Oneida, Madison county. *H. D. House,* June 18, 1921.

This differs from Phyllachora graminis, which is astomous and tuberculose, by its prominent perithecia. It has much smaller stromata than Scirrhia ostiolata Ell. & Galw. which it resembles in the cell contents. Some of the stromatic sections look more like Diaporthe than a Dothideaceous genus. Most of the leaves were also infected with Puccinia urticata.

Phyllachora Melicae Dearness & House, sp. nov.

Stroma oblong, ends truncate, shining, dark brown, ½ to 1 mm long, 160 μ wide (width 1-rowed loculi) to 500 μ wide (in 3-rowed examples), visible on both sides of the leaf, clypeate on the upper side. Loculi in one–three rows, stromatic on the upper side of the leaf, globular, 88–136 μ in diameter, base wall 25 μ thick, side walls 16–18 μ thick, upper with adnate clypeus 30–35 μ thick, of compact dark colored short celled parenchyma. Asci cylindric, short pedunculate, 55–62 x 7–8 μ, paraphyses linear, longer than the asci. Sporidia obliquely monostichous, hyaline, grumous, broadly elliptic, 7–8 x 5–5½ μ.

On dead leaves of Melica purpurascens (Torrey) Hitchc. (*Avena striata* Michx.), Newcomb, Essex county. *H. D. House,* June 23, 1923. This comes near Phyllachora vulgata Thiess. & Sydow,[13] which inhabits species of Muhlenbergia. Phyllachora melicicola Speg.,[14] on Melica,

Phyllachora Oryzopsidis Theiss. & Sydow[15]

On languishing and dead leaves of Oryzopsis asperifolia Michx., New London, Oneida county. *H. D. House,* July 20, 1918. The type of this species was collected by *Dearness,* at London, Ontario, on the same host species, and is represented by Bartholomew's Fungi Columbiana no. 3536.

Lasiosphaeria xestothele (B. & C.) Sacc.

This was reported by Doctor Peck[16] as Sphaeria xestothele B. & C. on birch bark, from Oneida, collected by *H. A. Warne.* Reexamination of the material shows it to be merely Rosellinia

[13] F. Theissen & H. Sydow. Die Dothideales. Annales Mycologici 12: 450. 1914.

[14] Myc. Argent. IV. n. 710. Sacc. Syll. 22: 423. Theissen & Sydow. l.c. p. 449.

[15] Theissen & Sydow. l.c. p. 451.

[16] 30th Rep't N. Y. State Mus. 65. 1878.

aquila (Fr.) DeNot., and the name Lasiosphaeria xestothele should be for the present deleted from lists of New York fungi. The species itself is doubtful. Among some specimens in the state herbarium is one from M. A. Curtis (no. 4972), which may be cotype material of the species, collected on Cornus florida L., in South Carolina. It appears to be a species of Eriosphaeria rather than Lasiosphaeria.

Zignoella pulviscula (Curr.) Sacc.
(Z. ovoidea Fries)

Helderberg mountains, Albany county, on bark of Acer spicatum Lam. *C. H. Peck,* August (year of collection not indicated). Doctor Peck has previously reported this on decorticated wood from Buffalo, collected by Clinton. Doctor Fairman[17] reports it from Lyndonville, Orleans county, on chips of Betula lutea Michx.f.

Otthiella staphylina (E. & E.) Dearness & House, comb. nov.

Plowrightia staphylina E. & E. Proc. Acad. Nat. Sci. Phila. p. 248. July 1890
Otthia staphylina E. & E. N. Am. Pyren, 251. 1892

Albany, on dead branches of Staphylea trifolia L. *C. H. Peck,* April (year of collection not indicated). The spores are hyaline which places the species in Otthiella.

Cucurbitaria Comptoniae C. & E.

On dead stems of Comptonia peregrina (L.) Coulter (Myrica asplenifolia L.), Delmar, Albany county. *H. D. House,* December 21, 1919. The collection also contains Valsa ambiens (Pers.) Fr.

Amphisphaeria applanata (Fr.) Ces. & DeNot.

On wood of Acer spicatum Lam. East Berne, Albany county. *C. H. Peck,* August (year of collection not indicated). Spores 18–33 μ long, mostly about 22–24 x 8–15 μ, the two cells unequal.

Amphisphaeria thujina (Peck) Sacc.

Doctor Peck in the original description of Sphaeria thujina[18] does not describe the asci. Ellis[19] stated that it "may be

[17] Proc. Rochester Acad. 4: 223. 1906.
[18] 27th Annual Rep't N. Y. State Mus., 110. 1875.
[19] N. Am. Pyrenomycetes, 204. 1892.

only a Diplodia." Careful examination of the type material finally yielded mature asci. The perithecia are not typical of the genus. They are nearly twice as long as wide at the base and although pertusate, are not circularly so. The asci are eight-spored, various in shape, the longest reaching 135 μ densely paraphysate; sporidia brown, one-septate, subbiseriate to conglobate, 27–44 x 9–15 μ. On decorticated and decayed wood of Thuja occidentalis L. Adirondack mountains. *Peck.* Also collected by *Pringle,* on the same host in Vermont.

Teichospora Chevalierii Karst.

Newcomb, Essex county, on dead branches of Myrica Gale L. *H. D. House,* June 8, 1922.

This must be regarded as a tentative determination since the material is not abundant, nor is there an authentic specimen available for comparison. The measurements are approximately those of the species named. The noncollapsing perithecia contain asci weak and variable in shape, average about 120 μ in length, eight-spored, densely paraphysate; sporidia variable, about 17–21 x 9–10 μ, three-septate, constricted at the septa, becoming so opaque as to obscure the septation.

Glomerella cingulata (Stoneman) Spaulding & Von Schrenk[20]

The conidial stage, Gloeosporium cingulatum Atk. richly covering languishing and dead leaves of Camaridium grandiflorum Ames (Orchidaceae), El Boquete, Panama, *E. P. Killip,* February 18, 1918. The Gloeosporium and its ascigerous stage, Glomerella cingulata, on dying leaves of Fureraea Cabuya integra Trelease, at Bella Vista, Panama. *E. P. Killip,* September 29, 1917.

Guignardia Pleurothallis Dearness & House, sp. nov.

Perithecia epiphyllous, gregarious on areas of .5–1 cm which are greener than the surrounding portions of the leaf, finally thickly scattered over the whole leaf, dark brown, .1–.2 mm, waxy membranous. Asci fusoid or clavate, mostly about 45 x 10 μ, surrounded by a few indistinct paraphyses. Sporidia subbiseriate, grumous-hyaline, some of them curved, depending upon their position in the ascus, variable in size as well as shape, mostly 12 x 2–3 μ.

---

[20] Science, N. S. 17: 750. 1903 (Gnomoniopsis, Stoneman, Bot. Gaz. 26: 101. t. VII, f. 27–28. 1898. Not Berl. 1892).

On languishing leaves of Pleurothallis ruscifolia Sw., in deep woods, valley of the Rio Piarnasta, Panama, 1500 meters altitude. *E. P. Killip,* February 25, 1918.

Guignardia caricis Dearness & House,[21] nom. nov.

Laestadia caricis Dearness & House. N. Y. State Mus. Bul. 205: 52. 1919.

On dead leaves of Carex strictior Dewey (C. stricta Auth.) northern Herkimer county. *H. D. House,* 1917 (type).

Guignardia depressa (Peck) Dearness & House, comb. nov.

Sphaerella depressa Peck. N. Y. State Mus. Rep't. 33: 34. 1880
Laestadia depressa Berl. & Vogl.; Sacc. Syll. Add. 1–4*a*: 61. 1886
Mycosphaerella depressa House. N. Y. State Mus. Bul. 233–34: 27. 1922

On dead stems of Lactuca sp. Karner, Albany county. *C. H. Peck* (type).

Guignardia smilacinae Dearness & House, nom. nov.

Laestadia smilacinae Dearness & House, N. Y. State Mus. Bul. 205: 53. 1919

On dead leaves of Vagnera stellata (L.) Morong. Karner, Albany county. *C. H. Peck* (type).

Mycosphaerella conigena (Peck) House

On cone scales of Thuja occidentalis L. Newcomb, Essex county. *H. D. House,* June 22, 1923. Doctor Peck collected the type of this in the Helderberg mountains in 1879, and also made collections of it at Elizabethtown and Newcomb.

Mycosphaerella Pontederiae (Peck) House

Newcomb, Essex county, on dead leaves of Sarracenia purpurea L. *H. D. House,* June 25, 1920. On the same leaves is Discosia artocreas (Tode) Fr.

---

[21] The prior generic name Guignardia Viala & Ravaz, is used by Traverso, Lindau, Schroeter, Shear and others, in place of Laestadia Auersw, 1869, not Lessing. In addition to the three species here transferred, the state herbarium contains the following species of this genus collected in New York:

Guignardia Aesculi (Peck) V. B. Stewart
Guignardia Bidwellii (Ell.) Viala & Ravaz
Guignardia carpinea (Fr.) Schroeter
Guignardia epilobii (Wallr.) Lindau
Guignardia fraxinicola (Curt.) Lindau

Mycosphaerella punctiformis (Pers.) Johanson

On fallen leaves of Fagus grandifolia Ehrh. Oneida, Madison county. *H. D. House,* June 2, 1923.

Mycosphaerella verbascicola (Schw.) Fairman

On dead stems of Verbascum Thapsus L., Westernville, Oneida county. *H. D. House,* June 2, 1923, associated with Phoma verbascicola Sacc., with very minute spores, and which is doubtless a stage of the Mycosphaerella.

Metasphaeria aulica (C. & E.) Sacc.

On dead stems of Eupatorium purpureum L., Newcomb, Essex county. *H. D. House,* June 23, 1923. Previously reported[22] on stems of Triosteum aurantiacum Bicknell.

Metasphaeria leiostega (Ell.) Sacc.

On dead stems of Rosa blanda Ait., Newcomb, Essex county. *H. D. House,* June 28, 1923. The sporidia in this material are 8–11 μ wide, while the original description gives them as only 7–8 μ wide. Doctor Fairman[23] has reported this species from western New York.

Metasphaeria microecia E. & E.

On dead twigs of Acer spicatum Lam. Newcomb, Essex county. *H. D. House,* June 20, 1923.

Leptosphaeria borealis E. & E.

var. **Populi** Dearness & House, var. nov.

Immersed in the decorticated wood of the host, and differing from the type on Salix in the sporidia varying from three to five-septate and in being constricted at the septa. The sporidia are irregular in size and shape but are mostly 19–22 x 6–9 μ, and become very dark colored; paraphyses abundant and branching.

North Elba, Essex county, on decorticated branch of Populus balsamifera L. *C. H. Peck* (year of collection not indicated). Intermediate between Leptosphaeria borealis E. & E. and Leptosphaeria consimilis E. & E.

---

[22] N. Y. State Mus. Bul. 233–34: 38. 1922.
[23] Journal of Mycology 5:79. 1889

Leptosphaeria culmifraga (Fr.) Ces. & DeNot.

On dead culms of Phleum pratense L. Newcomb, Essex county. *H. D. House,* June 21, 1923. Typical perithecia and sporidia abundant, but near the joints of the host occur larger perithecia with brown 6-septate sporidia.

Leptosphaeria dumetorum Niessl.

On dead stems of Clematis virginiana L. Newcomb, Essex county. *H. D. House,* June 22, 1923.

Ophiobolus filisporus (C. & E.) Sacc.

On dead stems of Veratrum viride L., Peterboro, Madison county. *H. D. House,* June 9, 1923. On dead stems of Scrophularia lanceolata Pursh (S. leporella Bicknell), Newcomb, Essex county. *H. D. House,* June 23, 1923.

Pleospora herbarum (Pers.) Rabenh.

On dead stems of Lathyrus maritimus (L.) Bigel. Woodville, Jefferson county. *H. D. House,* June 6, 1923. Typical and in good fruit.

var. **Triglochinis** Dearness & House, var. nov.

This interesting variety of a very common species departs from the usual form in the following particulars: ostiola stronger; asci larger, the largest ones measuring 362 x 48 μ, and are more mucilaginous, the wall being 9 μ thick and at the tip up to 16 μ thick; sporidia mostly 45–48 x 18–21 μ, in sheaths 6 μ thick; paraphyses less abundant.

On dead leaves of Triglochin palustris L. Bergen swamp, Genesee county. *C. H. Peck,* June. These mucilaginous structures in this species naturally swell and elongate by the absorption of water, but that fact does not invalidate comparisons with typical forms of the species similarly treated.

Pleospora scabra Mout.[24]

Material collected at Woodville, Jefferson county, on dead leaves and culms of Ammophila arenaria (L.) Link. *H. D. House,* June 21, 1922, is referred here with some hesitation. The paraphyses are long, and the sporidia are 37 x 12–14 μ, which with

[24] IV Not. Ascom. Nouv. in Bul. Soc. Bot. Belg. 48. 1900.

other features indicate that the fungus comes nearer to this species than to any other one described. The species was originally described from Belgium on grass culms, the exact species not indicated.

Pleospora vagans Niessl.

Long Beach, Long Island, on dead culms of Phragmitis Phragmitis (L.) Karst. *H. D. House,* May 10, 1922. On the same collection is Pseudographis Phragmitis Dearness & House, Coniosporium arundinis (Corda) Sacc., and Lophodermium arundinaceum (Schrad.) Chev., var. vulgaris Fckl.

Splanchnonema conspurcata (Wallr.) Kuntze[25]

Albany, on dead branches of Prunus serotina Ehrh. *H. D. House,* November 8, 1919. Doctor Peck collected this on Prunus americana Marsh., and Shear collected it on Prunus virginiana L. (state herbarium).

Gnonomia setacea (Pers.) Ces. & DeNot.

var. **Caryae** Dearness & House, var. nov.

The typical form of this species has sporidia 12–16 x 1.5–2 μ. The late Mr Ellis reported finding a form on Carya at Newfield, N. J. with sporidia 20–25 μ long. In a collection by Doctor Peck, we find the same form as reported by Ellis. The sporidia reach 30 x 2.75–3 μ in size, and it may be regarded as a variety.

Greenbush, Rensselaer county, on fallen leaves of Hicoria glabra (Mill.) Britton (Carya glabra Spach). *C. H. Peck,* June (year of collection not indicated).

Diatrype platystoma (Schw.) Berk.

Newcomb, Essex county, on dead branches of Acer rubrum L. *H. D. House,* July 20, 1920. Probably not rare, as Kauffman[26] reports it from North Elba on Acer, Doctor Peck has collected it on the same host at Karner and at Shandaken, and Fairman has collected it in Orleans county.

---

[25] Massaria conspurcata (Wallr.) Sacc. Syll. 2: 11. 1883. The generic name Massaria DeNot. (Giorn. Bot. Ital. 1: 333. 1845), is antedated by Splanchnonema Corda, in Sturm, Fl. III (2): 115. t. 54. 1829. The type species, Splanchnonema pustulatum Corda, is identified by A. de Jaczewski (Bul. Herb. Boiss. 2: 674) as Massaria foedans (Fr.) Fckl.

[26] N. Y. State Mus. Bul. 179: 84. 1915.

Diatrypella decorata Nitschke

Newcomb, Essex county, on dead branches of Betula lutea Michx.f. *H. D. House,* June 8, 1922. Doctor Peck recorded this on the same host species from Sandlake.

Diatrypella discoidea (Cooke & Peck) Sacc.

On dead limbs of Betula papyrifera Marsh. Indian Pass, Essex county. *H. D. House,* July 15, 1923. Compared with material of D. favacea, D. betulina and D. decorata (all on Betula), which has been passed upon as authentic for the species named, by either Ellis, Farlow, Peck or Rehm. This comparison indicates that there is some confusion in regard to the status of these four species. The only clause in the description of D. discoidea discrepant with the Indian Pass material is that according to the description the large orbicular stromata have small perithecia and small, scarcely exserted ostiola, while the ostiola in the Indian Pass collection are distinct and sulcate.

Diatrypella quercina (Pers.) Nits.

East Greenbush, Rensselaer county, on dead branches of Crataegus sp. *H. D. House,* May 23, 1923. There is a collection by Peck in the State herbarium from the same locality and on the same host genus. Doctor Peck has also collected this on Crataegus at Elizabethtown, Essex county.

Valsa ceratophora Tul.

Albany, on dead stems of Cephalanthus occidentalis L. *H. D. House,* November 5, 1922.

Anthostoma amplispora (Cooke) E. & E.

On dead branches of Prunus virginiana L. Albany. *H. D. House,* December 28, 1919. Cooke's description of this species is not very complete. It states that the perithecia in a stroma are few and rather large. Some of the stroma have twelve or more perithecia, but with the exception that the perithecia can not be called relatively large, there are stromata, perithecia, asci and sporidia agreeing with his description. The type was said to be "on bark, probably of Quercus, United States."

Anthostoma cercidicolum (B. & C.; Peck) Sacc.

Diatrype cercidicola B. & C.; Peck. 25th Rep't N. Y. State Mus. 101. 1873
Hypoxylon suborbiculare Peck. 30th Rep't N. Y. State Mus. 63. 1878. Not Welw. & Curr. 1867
Nummularia lateritia E. & E. Proc. Phila. Acad. 144. 1893
Anthostoma cercidicolum Sacc. Syll. 1: 306. 1882—E. & E. N. Amer. Pyren. 582. 1892

On dead branches of black ash, Fraxinus nigra Marsh. Newcomb, Essex county. *H. D. House,* July 20, 1920.

For a description of this species see N. Y. State Mus. Bul. 205–6: 44. 1919. It seems that Doctor Peck having at hand a specimen from Curtis labelled "Diatrype cercidicola B. & C." decided that it was the same as a collection from Buffalo by Clinton, and hence gave first definite formal publication to the name, accompanied by a description of the Clinton material and giving the black ash as the host species.

Examination of the Curtis specimen referred to shows that it is not the same as the Clinton material. The Curtis specimen came from Alabama (by Peters?), and the host is said to be Cercis, which is probably correct. What other specimens from Curtis, under this name, in other herbaria may be we do not know. Cooke[27] listed the species without comment, having previously[28] transferred the name to Fuckelia. From his treatment the inference is plain that he went by Doctor Peck's description, and that if a specimen from Curtis was at hand, he did not examine it. This follows a statement[29] that he did not have "fungus spores on the brain," and that no notes had been made. If Cooke had made a study of the Curtis specimen, it is possible that one of the worst mix-ups in mycological nomenclature might have been avoided. As the matter now stands we are obliged to retain Doctor Peck's name for the species on black ash, a misleading name based upon a misapplication of an older herbarium name.

Diaporthe acerina Peck

On dead twigs of Acer spicatum Lam., Newcomb, Essex county. *H. D. House,* June 20, 1923. In the dense thicket of Acer spicatum, where this material was collected, the following species were collected upon the same host species:

Acrosperum cuneolum D. & H.
Cenangium griseum D. & H.
Diaporthe spicatum E. & E.

[27] Grevillea 14: 16. 1885.
[28] Grevillea 12: 52. 1883.
[29] Cooke, l. c. p. 51.

Hypoderma rufilabrum (B. & C.) Duby
Leptothyrella aceris D. & H.
Metasphaeria microecia E. & E.
Ombrophila setulata D. & H.

Diaporthe aorista E. & E.

On dead stems of Aster lateriflorus (L.) Britton, Bonaparte swamp. Lewis county, *H. D. House,* June 23, 1920. On dead stems of Solidago macrophylla Pursh, Indian Pass, Essex county. *H. D. House,* July 15, 1923.

The type of this species was collected at Newfield, N. J., on host said to be Solidago.[30] Saccardo[31] in compiling the species wrongly credits it to New York State. The Indian Pass material, except for the spore measurements, seems to agree better with the published description of D. aorista than the specimens distributed in Fungi Columbiana no. 1043 and North American Fungi no. 3432. An odd sporidium is subappendiculate, and many of them are larger than the measurements given in the original description. They are nearly all flat on one side and rounded on the other, instead of oblong as described. Diaporthe exercitalis Peck is evidently closely related.

Diaporthe Arctii (Lasch) Nits.

On dead stems of Arctium minus Bernh. Peterboro, Madison county. *H. D. House,* June 9, 1923. D. Arctii is described as having inequilateral or slightly curved sporidia, and D. orthoceras as having straight sporidia and longer ostiola. The sporidia in the Peterboro material are straight, but the other features all agree with the description of D. Arctii.

Diaporthe disciformis (Hoffm.) Fr.

On dead branches of Amelanchier canadensis (L.) Medic. Albany. *H. D. House,* April 6, 1923. Apparently an unreported host for this fungus, which has been recorded from a variety of hosts, chiefly in Europe (Saccardo gives Alnus, Betula, Castanea, Fagus, Prunus, Rhamnus and Viburnum). It is recorded from none of these host genera in New York. Doctor Peck's only collection of it is on Acer spicatum Lam., from the Catskill mountains, and Fairman[32] reports it from Lyndonville, on Ribes, as forma ribincola Rehm.

---

[30] Bul. Torrey Bot. Club 24: 132. 1897.
[31] Syll. Fung. 14: 549. 1899.
[32] Fairman, Annales Mycologi 8: 330. 1910.

Diaporthe impulsa (Cooke & Peck) Sacc.

Newcomb, Essex county, on dead branches of Sorbus americana Marsh. *H. D. House,* June 8, 1922.

Diaporthe megalospora E. & E.

Newcomb, Essex county, on dead twigs and branches of Sambucus canadensis L. *H. D. House,* June 23, 1923. There is present also in this collection a Metasphaeria, which may not be mature, but which is probably Metasphaeria subcutanea (C. & E.) Sacc. It differs, however, from typical examples of that species, in its sporidia being 18 x 3–4 μ, and the second cell from the top being widest (4 μ wide), subbiseriately arranged and slightly smoky in color.

Diaporthe menispermoides Dearness & House, nom. nov.

D. Menispermi Dearness & House, N. Y. State Mus. Bul. 233–34: 34. 1922. Not Speg. 1909

On dead stems of Menispermum canadense L., Albany, *House,* 1917.

Diaporthe obscura Peck

On dead stems of Rubus odoratus L. Indian Pass, Essex county. *H. D. House,* July 15, 1923. The type collection of this fungus was made by Doctor Peck near Albany on Rubus strigosus, in 1874.

Diaporthe phomaspora (C. & E.) E. & E.

Long Beach, Long Island, on dead twigs of Myrica carolinensis Mill. *H. D. House,* May 10, 1922 Newcomb, Essex county, on dead branches of Myrica Gale L. *H. D. House.* June 8, 1922. Doctor Peck has collected this at Grassy pond, Essex county, on Myrica Gale L., under the name of Diaporthe Wibbei Nitsch.[33]

Diaporthe spicata E. & E.

Newcomb, Essex county, on dead branches of Acer spicatum Lam. *H. D. House,* June 6, 1922. Previously collected by Doctor Peck at Knowersville, Albany county, on the same host species, and reported as Diaporthe myinda (C. & E.) Sacc.[34]

[33] N. Y. State Mus. Bul. 197: 28. 1918.
[34] 34th Rep't N. Y. State Mus. 52. 1881, as Valsa myinda.

Diaporthe tessera (Fr.) Fckl.

Newcomb, Essex county, on dead branches of Corylus cornuta Marsh. (C. rostrata Ait.) *H. D. House,* June 21, 1923.

Melanconis modonia Tul.

South Ballston, Saratoga county, on dead branches of Juglans cinerea L., associated with Diaporthe bicincta Cooke & Peck. Melanconis modonia has been heretofore reported only on Castanea, but the material here cited can not be referred elsewhere. The collection is by Doctor Peck, and the chambered pith of the host material makes the identification of the host species positive.

Melanconiella nigrospora (Peck) Dearness & House, comb. nov.

Diatrype nigrospora Peck. 33d Rep't N. Y. State Mus. 33. 1880
Melanconis Meschuttii E. & E. Torrey Club Bul. 10: 117. 1883
Melanconiella Meschuttii Berl. & Vogl., in Sacc. Syll. Fung. Add. 1–4*a*: 129. 1886; 9: 754. 1891
Valsaria nigrospora Berl. & Vogl., in Sacc. Syll. Fung. Add. 1–4*a*: 129. 1886

On dead branches of Betula lutea Michx.f. Quaker Street, Schenectady county. *C. H. Peck* (type). Sandlake, Rensselaer county, on same host. *C. H. Peck.*

Melanconiella subviridis (Peck) Dearness & House, comb. nov.

Melanconiella Decoraensis var. subviridis Peck; Ellis, N. Amer. Pyren. 528. 1892

Stroma circular, reaching 2 mm in diameter, depressed hemispheric, covered by the epidermis which is narrowly cleft above the group of minute ostiola, lacking any visible disk. Perithecia 10–15 in a stroma, .4–.65 mm in diameter, coriaceous, circinate around a dull greenish, pulverent core, detachable with the epidermis and leaving their impress in the surface of the unaltered cortex, necks converging not around a disk, but to a point or line and terminating in black, shining, minutely sulcate ostiola, 30–50 μ in diameter. Asci nearly sessile, cylindrical, 120–125 x 9–12 μ, paraphysate. Sporidia dark brown, uniseptate, uniseriate in the asci, the portion above the septum usually larger than the other, 18–21 x 7–10 μ.

On dead branches of Betula populifolia Marsh. Ganse-voort, Saratoga county. *C. H. Peck,* September, 1886 (type).

Its associated conidial stage, **Melanconium subviridis** Dearness & House, sp. nov. is abundant in the type material, and conspicuous by its blackening the epidermis in circles 2–2.5 mm in diameter. The conidia are inequilaterally fusoid, distally rounded and sub-attenuate proximally, 17–22 x 7–10 μ.

Its size and habit of circinating between the epidermis and cortex presumably led Doctor Peck to call it Melanconiella decoraensis. Mr Ellis remarked upon the greenish, pulverulent stroma and called it variety subviridis Peck, although in the place cited by Ellis, Doctor Peck did not publish any such varietal name, nor elsewhere. In addition to the other differences are the lack of a disk, the larger asci and spores, and the marked differences in size and shape of the conidial stage.

Xylaria Castorea Berk.

Newcomb, Essex county. *H. D. House,* September 20, 1922. Hulett's Landing, Lake George. *Madge Dearness Tamblyn,* September 1, 1915.

The type of Xylaria Castorea Berk. was collected in New Zealand, but Morgan sent to M. C. Cooke specimens from Ohio which Cooke identified as this species. J. B. Ellis wrote a description of the Morgan specimens[35] which agrees with the New York material. Lloyd is disposed to regard it as a variety of Xylaria polymorpha. Doctor Peck collected it at Lowville, Lewis county, and described it as Xylaria corniformis irregularis.[36] Subsequently he made additional collections at Floodwood, Ampersand pond and North Elba, which he identified as Xylaria Castorea,[37] and also changed the name of "irregularis" on his herbarium specimens to "Castorea."

SPHAEROPSIDEAE

Phyllosticta Cyanococci Dearness & House, sp. nov.

Spots pale brown beneath, darker above, 2–5 mm broad, extending in some cases to occupy most of the leafblade, microscopically specked with very minute, whitish blisters simulating pycnidia, surrounded by a reddish brown border, .5–1 mm wide. Pycnidia erumpent, becoming black, epiphyllous, central and single on a spot, 75–100 μ; spores hyaline, bacillar 3–4 x 1¼ μ.

Quite destructive to living leaves of Vaccinium corymbosum L. (Sect. Cyanococcus), Newcomb, Essex county. *H. D. House,* July 18, 1922. Many of the large spots contain no pycnidia.

Phyllosticta limitata Peck

Williamson, N. Y., on leaves of Malus Malus (L.) Britton. *Dr F. C. Stewart,* August 28, 1902. The type of the species was

[35] N. Amer. Pyren. 666. 1892.
[36] 28th Rep't N. Y. State Mus. 87. 1879.
[37] N. Y. State Mus. Bul. 28: 228. 1899.

collected by Doctor Stewart at Floral Park, Long Island, on the same host species in 1895.

Phyllosticta minutissima E. & E.

On leaves of Acer pennsylvanicum L., Osceola, Lewis county. *H. D. House,* September 20, 1922. The spores and position agree (2 x ½–¾ μ) with the description. It lacks, however, the yellow bordering and the association with the Cylindrosporium, a curious feature of the typical western form of the species on Acer glabrum.

Phyllosticta Syriaca Sacc.

Napanoch, Ulster county, on leaves of cultivated garden okra (Hibiscus esculentus L.). *H. D. House,* August 21, 1921. In general characters this seems to be nearest to Phyllosticta Syriaca, but the spores are not uniform, taking one leaf with another, and some of them are septate. Stevens[38] reports this fungus on Hibiscus Syriacus L., from Syracuse.

Macrophoma dryina (B. & C.) Berl. & Vogl.

On dead twigs of Quercus ilicifolia Wang., and on cynipid galls (Neuroterus) on same twigs. Albany. *H. D. House,* April 28, 1923.

Macrophoma Pernettyae Dearness & House, sp. nov.

Pycnidia hypophyllous, black, innate, erumpent, subglobose, rising 1.6 mm above the ruptured cuticle and completed by a cylindrical ostiolum .1 mm high and .1 mm thick. Conidia elliptic-oblong to obovate-oblong, hyaline, clear or grumous, 21–24 x 12 μ, wall 1 μ thick.

On languishing leaves of Pernettya coriacea Kl. on the rocky summit of Chiriqui volcano, Panama, 3600 meters altitude. *E. P. Killip,* February 27, 1918. The affected portion of the leaf is paler or grayer than the adjacent unaffected surface.

SCOPAPHOMA Dearness & House, gen. nov.

Phomataceous, pycnidia with papillate or short-beaked ostiola and hyalo-scolecosporous conidia upon dendroid or scopaform conidiophores to which they are adnate by long, attenuated extensions of the epispore. Type species: Scopaphoma Corioli.

[38] Journal of Mycology 13:69. 1907.

Scopaphoma Corioli Dearness & House, sp. nov.

Pycnidia in series along the zonal lines of the pileus of the host, chiefly near the margin, raising the surface into pustules tipped by the black, papillate ostiola, subglobose or commonly ellipsoid with longer diameter parallel to the fibres of the matrix, reaching 600 x 250 μ. Conidia when stained showing a beak 9–12 x 1.7–2 μ, plasmal portion 16–21 x 2–2½ μ, and a basal linear extension 50–150 x .3–.5 μ. The fruiting layer separates in dissection into whisk-broom like masses 120–180 μ from tips to base.

On old and somewhat dried pilei of Polystictus (Coriolus) versicolor (L.) Fr. Albany. *C. H. Peck,* June (year of collection not indicated).

Phoma glandicola Desm.

On galls of Quercus ilicifolia Wang. caused by Amphibolips ilicifoliae Boss. Albany. *H. D. House,* April 28, 1923. Spores 5–6 x 2 μ.

Phoma melaena (Fr.) Mont. & Dur.

Albany, on dead stems of Vicia tetrasperma (L.) Moench. *H. D. House,* April 25, 1922.

Phoma nervisequa (Cooke) Sacc.

On the same collection of Amphibolips galls on Quercus ilicifolia Wang., as Phoma glandicola. Spores 8–12 x 5–7 μ.

Dendrophoma Azaleae Dearness & House, sp. nov.

Pycnidia black, sparsely scattered, truncate, erumpent, seated in the cortex and rising above it .5 mm. in some cases two or three connate on a stromalike base; conidia hyaline, oblong, 8–14 x 1 μ, on densely branching, fasciculate conidiophores, separating on dissection into units resembling so many bushy fox tails.

On dead branches and twigs of Azalea periclymenoides Michx. (Azalea nudiflora of N. Y. Reports), Albany. *C. H. Peck,* May (year of collection not indicated).

Sphaeronema pallidum Peck

On dead branches of Sorbus americana Marsh. Newcomb, Essex county. *H. D. House,* June 23, 1923.

Sphaeronema pruinosum Peck

On dead branches of Amelanchier Bartramiana (Tausch) Roem. (A. oligocarpa (Michx.) Roem.), Newcomb, Essex county. *H. D. House,* June 10, 1922.

Sphaeronema Robiniae B. & C.

On dead twigs of Tilia vulgaris Hayne (T. europaea Auth.), Orient, Long Island, *Roy Latham,* April 1915. On the same material is found Melanconis tiliaceae (Ell.) E. & E.

Placosphaeria Baccharidis Dearness & House, sp. nov.

Pycnidia seated upon or immersed in a black, pitchlike stroma, developed beneath the cuticle in the cortical parenchyma between the strong fibro-vascular strands of the cortex, externally black, rough so far as emergent, internal layer of conidiophores and immature conidia whitish, 180 μ to 200 μ. Conidia finally brown, in some pycnidia continuous, in others mostly continuous but partly one-septate, the latter usually shorter and wider and nonconstricted, 16 x 12, 18 x 9–10, 27 x 8, but mostly about 20 x 9 μ, on conidiophores shorter than their length.

Associated with Creonectria purpurea (L.) Seaver, on dead branches of Baccharis halimifolia L. Long Beach, Long Island. *H. D. House,* May 10, 1922.

Macroplodia Clematidis Dearness & House, sp. nov.[39]

Pycnidia thickly scattered or closely seriate on the inner bark which is thrown off but not punctured, carbonaceous, rough, hemispheric to subglobose, basal diameter reaching 350 μ, and height 250 μ, with well-developed papillate ostiola. Conidia pale brown, elliptic-oblong, 15–20 x 6–8.5 μ, contents uniform, wall 1 μ thick.

On dead stems of Clematis virginiana L. Selkirk, Albany county. *H. D. House,* April 25, 1923. In the nomenclature of Saccardo's Sylloge this would be known as Sphaeropsis Clematidis D. & H.

Macroplodia Ellisii (Sacc.) Kuntze

Sphaeropsis Ellisii Sacc., var. Laricis Peck. 44th Rep't N. Y. State Mus. 23. 1891

[39] Kuntze (Rev. Gen. Pl. 3: 491. 1893) has indicated the priority of Macroplodia Westendorp (Bul. Acad. Brux. II, 2: 562. 1857), over Sphaeropsis Saccardo (the type of Sphaeropsis Lev. being a Phoma)

On dead twigs and branches of Larix laricina DuRoi, Newcomb, Essex county. *H. D. House,* June 23, 1923. The type of the variety Laricis was collected by Doctor Peck at Kasoag, Oswego county. Grove[40] states, "I have proved by examination of a long and fine series of examples that Phoma Pinastri Lev. and Sphaeropsis Ellisii Sacc. are merely growth stages of Diplodia Pinastri (Lev.) Grove."

Macroplodia phomatella (Peck) Kuntze

On fallen petioles of Fraxinus americana L., Albany. *H. D. House,* May 4, 1923. Not typical, the spore content more granular than in the type, and lacking the large guttae of the latter. The spores, however, are very variable, 20–26 x 8–12 μ. The type was collected by Doctor Peck, on twigs of Fraxinus americana L., in 1897, at West Troy. On a collection by *H. D. House,* on Fraxinus americana, at East Greenbush, May 23, 1923, the terminal portion of the dead twigs (the 1922 growth) contained Phoma fraxinea Sacc., doubtless a stage of Macroplodia phomatella, which was abundant on the 1921 growth of the same twigs.

Macroplodia juglandicola Dearness & House, sp. nov.

Pycnidia very numerous, closely scattered, raising the epidermis into pustules which are ruptured over the wide ostiola, flattened and adherent to the bark and coming off with it, .75 mm in diameter, the grayish center .5 mm in diameter. Conidia elliptic-oblong, 13–20 x 6–9 μ, but mostly about 18 x 7–8 μ, of a pale brown, uniform, enucleate content, on short conidiophores 2¾–3 μ wide, associated in some pycnidia with numerous small spores 8–9 x 3 μ, of similar shape and color.

Albany, on dead twigs of Juglans cinerea L. *H. D. House,* March 10, 1922 (type) and November 26, 1915. In the nomenclature of Saccardo's Sylloge this would be called Sphaeropsis juglandicola D. & H. Sphaeropsis Juglandis E. & B., on dead twigs of Juglans cinerea L., collected at Karner, Albany county. *H. D. House,* April 22, 1915, is easily distinguished from the above species by the large single nucleus in all of the more ellipsoidal spores.

Macroplodia simillima (Peck) comb. nov.

Sphaeropsis simillima Peck. Bul. Torrey Bot. Club 36: 337. 1909

[40] Jour. of Bot. 57: 207. 1919.

Geneva, on dead twigs of Acer platanoides L. *F. C. Stewart* and *F. M. Rolfs,* April 12, 1900. Like the type of the species, collected at River Forest, Ill., in 1909, this is densely gregarious and occasionally, perhaps frequently, haplosporelloid. The pycnidial and spore measurements agree. The spores in the type material are rather uniformly binucleate, while these have regularly one large central nucleus, the only marked difference. This has also been recently reported from Long Island.[41]

Macroplodia Wilsonii (Peck) Kuntze

On dead stems of Lonicera hirsuta Eaton, Pecksport, Madison county. *H. D. House,* June 2, 1923. Apparently the only collection in this State, at least, since the type collection made by *Clinton,* at Buffalo, on "Lonicera flava."

Microdiplodia Linderae (E. & E.) Dearness & House, comb. nov.

Diplodia Linderae E. & E. Proc. Acad. Phila. 79. 1891 — Sacc. Syll. 10: 278. 1892

On dead twigs of Benzoin aestivale (L.) Nees, Woodville, Jefferson county. *H. D. House,* June 6, 1923. The type of this fungus was collected by *Ellis* at Newfield, N. J., and *Dearness* has collected it at London, Ontario. This collection from Woodville also contains Dothidea Linderae Gerard,[42] also collected by Doctor Peck at Albany, and Didymosphaeria Linderae Sacc., not previously reported from this State.

Botrydiplodia Celastri (Cooke) Sacc.

On dead stems of Celastrus scandens L., Albany, *H. D. House,* April 6, 1923.

Ascochyta Rhei E. & E.

On living and languishing leaves of rhubarb, Rheum Rhaponticum L., cultivated at Newcomb, Essex county. *H. D. House,* July 18, 1923.

Hendersonia Viburni Ell.

Albany, on dead stems of Viburnum dentatum L. *H. D. House,* November 29, 1917.

---

[41] Burnham & Latham. Torreya 24: 27. 1924.
[42] Bul. Torrey Bot. Club 5: 40. 1874.

Septoria alnifolia E. & E.

Caroga, Fulton county, on leaves of Alnus incana L. *C. H. Peck,* July. This was reported by Doctor Peck[43] as Septoria alnicola Cooke. Ellis in describing Septoria alnifolia distinguished it from Septoria alnicola Cooke by the latter having oblong sporules. The sporules in the Caroga specimen are mostly linear and curved. Piper's collection on Alnus rubra Bong. from Seattle, Washington, August 1893, no. 82 (cotype of Septoria alnifolia), has sporules 1.5 μ wide, instead of 3 μ wide as stated in the original description. The Caroga collection by Doctor Peck, and a collection by Davis (on Alnus mollis, Vilas county, Wis., July 25, 1922) have sporules up to 2 μ thick, a little wider than the cotype material examined, but narrower than the description calls for.

Septoria aquilegiae Penz. & Sacc.

Woodville, Jefferson county, on living leaves of Aquilegia canadensis L. *H. D. House,* June 24, 1921.

Septoria Commonsii Ell. & Everh.

Newcomb, Essex county, on living leaves of Cirsium muticum L. *H. D. House,* August 6, 1921. Spores small and continuous, while in the more common Septoria Cirsii, they are about twice as large and septate.

Septoria conspicua E. & M.

Unadilla, N. Y., on living leaves of Steironema ciliatum (L.) Raf. *William J. Young,* September 23, 1922. Other collections in the state herbarium on the same host are: Long Island and Carrollton, *Peck;* London, Ontario, *Dearness;* Ottawa, *J. M. Macoun 180.* On Lysimachia quadrifolia L., Huntington, Long Island. *H. D. House.*

Septoria gentianoides Dearness & House, nom. nov.

S. Gentianae Dearness & House, N. Y. State Mus. Bul. 197: 35. 1918 Not Thumen.

On leaves of Gentiana quinquefolia L., Taberg, Oneida county. *House,* 1914.

---

[43] 38th Rep't N. Y. State Mus. 97. 1885.

Septoria maculifera Sacc.

Saugerties, Ulster county, on leaves of Parsonsia petiolata (L.) Rusby (Cuphea petiolata Koehne). *H. D. House,* October 8, 1921.

Septoria mollisia Dearn. & House[44]

This was described as occurring on the leaves of Antennaria neodioica Greene and Antennaria canadensis Greene. It has since been found on the leaves of A. neglecta Greene, A. Brainerdii Fernald, and A. plantaginifolia (L.) Rich., and to these must be added another host, Anaphalis margaritacea (L.) Benth. & Hook., Newcomb, Essex county. *H. D. House,* June 23, 1923. The description must be modified, since on the Anaphalis material the pycnidia reach 150 μ in diameter, and what seem to be mature spores, 60–75 x 1½ μ, multiseptate, the septa being 9–20 μ apart. There are, however, many other spores here which are not distinguishable from those in the type collection on Antennaria.

Septoria Sii Rob. & Desm.

Oneida, Madison county, on leaves of Sium cicutaefolium Schrank. *H. D. House,* September 15, 1921.

Rhabdospora continua (B. & C.) Sacc.

On dead stems of Plantago major L., Albany. *H. D. House,* May 11, 1923. Also collected many years ago at Buffalo, by *Clinton,* on Plantago lanceolata L.

Rhabdospora Polygoni Dearness & House, sp. nov.

Pycnidia thinly scattered, black, subcuticular, seated on and sometimes in the surface of the stem, hemispheric, often circularly depressed around the papillate ostiolum, 200–300 μ. Sporules hyaline, continuous, long, straight and narrow, 70–90 x 1 μ.

On dead stems of Polygonum virginianum L. East Greenbush, Rensselaer county. *H. D. House,* May 23, 1923.

Sphaerographium niveum Dearness & House, sp. nov.

Pycnidia thickly scattered, seated on the cortex, immediately under the epidermis, mostly snow-white, exceptionally fuligenous or

[44] N. Y. State Mus. Bul. 188: 39. 1916.

darker, elongated conic-frustumoid, tip truncate, 125 μ wide, base 250 μ in diameter, height .5–1 mm, mostly about .7 mm. Conidia hyaline, narrowly arcuate, attenuate-acute at both ends but more acutely pointed at the upper end, obscurely septate. When stained, 1 to 5, or usually 3 septa appear. Sometimes also nucleate, 35–60 x 2½ μ, mostly 45 x 2 μ, on fasciculate, much branched conidiophores.

Newcomb, Essex county, on dead branches of Rhamnus alnifolia L'Her. *H. D. House,* June 8, 1922 and June 20, 1923. Tahawas, August 13, 1924.

Leptothyrella Aceris Dearness & House, sp. nov.

Pycnidia thickly scattered, subcircular to elongate, situated in the cortex and beneath the cuticle which it raises into pustules about .5–.8 mm broad and .06 mm high; conidia hyaline, uniseptate, narrowly elliptic, 18–21 x 3 μ, on very slender conidiophores, 10–20 μ long.

Newcomb, Essex county, on dead twigs of Acer spicatum Lam., associated with Ombrophila setulata. *H. D. House,* June 8, 1922.

Leptostroma Allii Dearness & House, sp. nov.

Pycnidia scattered, black .4–.5 mm broad, opening somewhat variously by a nearly circular to elongate gap; conidia hyaline, short-oblong, 5–6 x 3 μ, on basidia 8–9 x 2–2.5 μ.

On dead stems of Allium tricoccum L. East Greenbush, Rensselaer county. *H. D. House,* April 15, 1921.

Leptostromella Angelicae Dearness & House, sp. nov.

Pycnidia brown, subcuticular, erumpent at the stoma or slit, thickly scattered or seriate in close lines, 150–180 μ, where seriate tending to become confluent and then elongating to 2 or 3 mm. Conidia hyaline, hamate or merely curved at the upper end, 15–18 x 1 μ on long, fasciculate conidiophores, the whisk broomlike units 60–75 μ in height, suggesting Petasodes.

On dead stems of Angelica atropurpurea L. North Greenbush, Rensselaer county. *C. H. Peck,* May (year of collection not indicated). Internally this is hardly distinguishable from Leptostromella rivana Sacc., which inhabits Acer pseudoplatanus in Europe.

Leptostromella Andropogonis Dearness & House, sp. nov.

Pycnidia shining black, epiphyllous, plainly visible beneath, but opening only on the upper side of the leaf, ovate to oblong-elliptic, .75–1.75 x .5 mm, opening by an acute rift. Conidia hyaline, curved to lunate, acute at both ends, mostly uniseptate, sometimes obscurely triseptate, nucleate, not constricted, 25–45, mostly 30–33 μ long, and 3 μ wide at the middle, on conidiophores 10–30 x 2 μ.

On dead leaves of Andropogon hirtiflorus (Nees) Kunth. Piedro de Lino, Panama. *E. P. Killip,* February 24, 1918. This approaches Leptostromella septorioides Sacc. & Roum. but differs in having wider conidia, and lacks the constrictions of the conidia of L. anceps Pass.

Leptostromella septorioides Sacc. & Roum.

On Panicum sp., Rio Parnasta, Panama. *E. P. Killip,* February 9, 1918. Conidia filiform, 40–60 μ, mostly 45 x 1 μ. Externally this looks exactly like Phyllachora graminis var. Panici Shear.

HELICIA Dearness & House, gen. nov.

Leptostromaceous. Pycnidia dimidiate, surface becoming spirally ridged; ostiola depressed and more or less elongated; spores bacillar, hyaline, catenate. Distinguished from Crandallia by the well-developed ostiolum. Type species: Helicia buccina.

Helicia buccina Dearness & House, sp. nov.

Pycnidia dimidiate, dark brown, scattered 75–600 μ at first hemispheric, finally depressed hemispheric, adnate to the blackened xylem of the host, in the mature examples exhibiting a spiral ridging of the upper third of the wall terminating in the ostiolum, the wall consisting of a layer of quadrate cells about 8–10 μ in radiate disposition; ostiolum in the mature examples turned down, trumpet form, 80–340 μ long, 85 μ thick at the base, narrowing to 40 μ above and slightly enlarging at the outwardly turned mouth, resembling the tone-arm of a gramophone. The mature pycnidium with its ostiolum is not unlike a curling stone in shape with the handle pressed down. Spores hyaline, bacillar, catenate, 5–6 x 2 μ, on short conidiophores, hardly distinguishable in the dense hymenial mass.

On dead stems of Eupatorium urticaefolium Reichard (E. ageratoides L.f.), Big Indian, *C. H. Peck,* September 1877. Under the lens this might at first be taken for a Corynelia.

Catinula turgida (Fr.) Desm.

On dead branches of Corylus cornuta Marsh. (C. rostrata Ait.) Newcomb, Essex county. *H. D. House,* June 21, 1923. Also collected at Albany by *Doctor Peck,* on Corylus americana Walt., and at West Fort Ann, by *Burnham,* on Corylus cornuta.

Myxosporium Liriodendri Dearness & House, sp. nov.

Acervuli immersed, thickly and regularly scattered as dark specks on the white, soft shoots of the host, .4–.5 x .275 mm, opening by roundish or slitlike perforations of the cuticle. Conidia hyaline, navicular, binucleate, 6–10 x 2½–3 μ, mostly 8 x 2¾ μ, on basidia 10–15 x 2 μ.

On dead shoots of the first year's growth of Liriodendron Tulipifera L. Oneida, Madison county. *H. D. House,* June 24, 1922. This appears to be quite different in every respect from Myxosporium coloratum (Peck) Sacc.,[45] on dead limbs of the same host. Myxosporium longisporum Edgerton,[46] described on twigs of the same host species from Poughkeepsie, N. Y., has conidia 30–48 x 12–15 μ.

Cylindrosporium fraxinicolum Dearness & House, sp. nov.

Spots subcircular, not bounded by the veinlets, 3–8 mm in diameter, immarginate but surrounded by a pale border, 2–4 mm wide, dull reddish-yellow above, paler beneath. Small, dark, Piggotialike pycnidia hypophyllous on a few of the spots. Acervuli epiphyllous, depressed pulvinate, strictly nervisequent, circular, 80–100 μ, but often linear or interruptedly linear from ¼ to 2 mm along a nerve, colorless or concolorous. Conidia hyaline, linear, nearly straight, nucleate, continuous or obscurely one to three septate, 18–30 x 2 μ.

On living leaves of Fraxinus americana L. Bolton, Warren county. *H. D. House,* July 20, 1917. This has been carefully compared with authentic material of four other species of Cylindrosporium occurring upon Fraxinus, and differs from all of them by the circular banded spots, nervisequent acervuli and narrowness of the sporules.

---

[45] Saccardo. Syll. Fung. 3: 722. 1884—Melanconium coloratum Peck, Bul. Torrey Bot. Club 10: 74. 1883.

[46] Edgerton. Annales Mycologi 6: 53. 1908.

Melanconium betulinum Schum. & Kze.

On dead limbs of Betula alba (cultivated), Albany. *H. D. House,* August 30, 1919. Spores 12–15 x 7–8 μ, many of them one-guttate.

Melanconium parvulum Dearness & Bartholomew[47]

On dead branches of Betula populifolia Marsh. Karner, Albany county. *C. H. Peck* (year of collection not given). On this material Melanconium parvulum seems to be confined to the smaller branches and twigs, while on the larger portions is found Melanconium stilbostoma Fr. Also collected in Washington Park, Albany, by *S. H. Burnham,* February 22, 1912, and identified as M. betulinum. The type of M. parvulum was collected at Lake Huron, Canada, in 1912, by Dearness.

Melanconium Typhae Peck

On dead leaves of Typha angustifolia L. Castle swamp, Oneida, Madison county. H. D. House, June 9, 1923.

Septomyxa grisea Dearness & House, sp. nov.

Acervuli gray, thickly scattered, circular, elongate, angular, intercortical, rupturing the epidermis which remains as a cap or partial lid for the convex spore mass, .5–2 mm. Spores elliptic, gray in mass, walls 1 μ thick, uniseptate, uniform content, 10–18 μ long, mostly 16 x 4–6 μ.

On dead twigs of Salix sericea Marsh. New London, Oneida county. *H. D. House,* June 1, 1923.

Marssonina Violae (Pass.) Magn.

Newcomb, Essex county, on living leaves of Viola cucullata Ait., and Viola septentrionalis Greene. *H. D. House,* July 22, 1922.

Coryneum Cydoniae Dearness & House, sp. nov.

Acervuli reddish brown, conspicuous by their size and the upturned cuticular wall surrounding them, irregular in shape and size, from minute dots to areas 2 mm wide and by confluence 6 mm long, in which several centers of growth can be distinguished.

[47] Mycologia 8:105. 1916.

Conidia separably amber colored, ranging in length from 33 to 45 μ, and in width from 14 to 20 μ, on stout conidiophores 6–20 x 6-8 μ.

On dead branches of Cydonia japonica Pers., Skaneateles, Onondaga county. *I. D. Smith,* April 29, 1921.

Pestalozzia funerea Desm.

On dead foliage and twigs of Thuja occidentalis L., hanging on the living trees, Houseville, Lewis county. *H. D. House,* June 8, 1923.

Pestalozzia Gaultheriae Dearness & House, sp. nov.

Acervuli amphigenous, but mostly hypophyllous, dark brown, erumpent and margined by the ruptured cuticle, 90–200 μ. Conidia fusoid, inequilaterally curved, 15–24 x 4.5–6 μ, four septate, the end cells hyaline, the three interior cells pale brown, the apical cell crowned by three or occasionally four hyaline setulae of different lengths, the longest sometimes exceeding the length of the body of the conidium, but mostly about 6.5–16 μ in length.

On dead leaves of Gaultheria sp. summit of Piedro de Lino, Panama. *E. P. Killip,* February 24, 1918. Pestalozzia gibbosa Harkness, and P. Sydowiana Bresadola, inhabit Gaultheria leaves, but both are epiphyllous and have conidia larger than the one here described.

Septogloeum Apocyni Peck

Newcomb, Essex county, on leaves of Apocynum androsaemifolium L. *H. D. House,* August 2, 1921.

HYPOMYCETES

Diplosporium flavidum Dearness & House, sp. nov.

The yellowish masses of hyphae and spores appearing in the lenticels of the host, also on the cut surface of the wood. Hyphae 10–12 μ thick at the base, irregularly branching in a dendritic manner, reducing finally to elongated, weak and mingled branches of about 3 μ in thickness. Conidia subobovate, uniseptate, hyaline like the hyphae under the microscope, 14–27 x 8–15 μ, mostly about 20 x 10 μ, rounded at the upper end and obtusely pointed at the lower end; wall 2 μ thick.

On Betula alba L., which had been in a damp cellar for some time. Albany, *H. D. House,* November 23, 1919. The limbs from which these chunks of wood were cut had been killed by the bronze birch borer (Agrilus anxius Gory).

Diplosporium Polypori Dearness & House, sp. nov.

Yellow; the individual hyphae long and irregularly branched, white, 3–8 μ thick. Conidia yellow, subglobose to oblong-elliptical, granular, smooth, uniseptate, exceptionally two-septate, 8–20 x 6–12 μ mostly about 15 x 10–11 μ.

On old pilei of Polyporus fissus Berk. (P. picipes Fr.), North Elba, Essex county. *C. H. Peck,* October 1907.

Ramularia Chamaenerii Rostrup

On living and languishing leaves of Epilobium angustifolium L., Hart lake, Adirondack lodge, near North Elba, Essex county. *H. D. House,* July 14, 1923. This material exhibits narrower spores than the original description calls for.

Ramularia Ranunculi Peck

On leaves of Ranunculus recurvatus Poir. Newcomb, Essex county. *H. D. House,* June 7, 1921.

Septoriopsis leptosperma (Peck) Davis

On living leaves of Aralia nuducaulis L., Indian pass, Essex county. *H. D. House,* June 23, 1923. Doctor Peck collected the type of this in 1884 at Aiden Lair, and also made later collections of it at Grassy pond, Essex county, and at Star lake, St Lawrence county.

Septocylindrium aromaticum Sacc.[48]

Examination of the type of Cylindrosporium Acori Peck[49] collected at Sandlake, on Acorus Calamus L., shows that the tufts are superficial but on such inconspicuous hyphae that it belongs in Septocylindrium, and differs in no essential feature from the description of S. aromaticum by Saccardo. Von Hohnel[50] states that Saccardo's species is a true Ramularia and transfers it to Ramularia aromatica (Sacc.) Von Hohnel.

Septocylindrium Ranunculi Peck

On living leaves of Ranunculus abortivus L., Wemple, Albany county. *H. D. House,* August 23, 1921.

---

[48] Michelia 2: 639. 1882 — Syll. 4: 224. 1886.
[49] 46th Rep't N. Y. State Mus. 32. 1893.
[50] Annales Mycologi 3: 189. 1905.

Ellisiella caudata Sacc.

West of Albany, on dead leaves of Sorghastrum nutans (L.) Nash. *H. D. House,* October 15, 1923. The chief character upon which Ellisiella rests is that the spores are attenuated into a base or pedicle, a character which this collection abundantly confirms. Saccardo's description of this genus and his remark on the type species, "deorsum (an quandoque apice ?)" shows that he held the view that the spores might possibly be attenuated upwards, which is not the case.

Cladosporium herbarum (Pers.) Link

On dead stems of Abutilon Theophrasti Medic., Lansingburgh, Rensselaer county. *H. D. House,* May 14, 1923. Recorded as an addition to the large number of host plants in this State for this common fungus.

Helminthosporium macrocarpon Grev.

Karner, Albany county, on dead twigs of Quercus ilicifolia Wang. *C. H. Peck.* Thumen's M. U. no. 1168, collected by Doctor Peck in 1877, is on this host. Other collections by Doctor Peck are on Corylus americana Walt., Carpinus caroliniana Walt., Acer saccharum Marsh., Acer spicatum Lam. and Tilia americana L.

Helminthosporium naviculatum Dearness & House, sp. nov.

Fertile hyphae erect or spreading, simple or sparingly branched, dark brown, septate, septa about 15 μ apart, 4–6 μ across. Conidia brown throughout, subacute at both ends, naviculate, equilateral, seven to nine septate, nucleate, 30–45 μ long, mostly 9 μ in width at the middle septum.

On dead herbaceous stems (probably Solidago), Bethlehem, Albany county. *C. H. Peck* (year of collection not indicated).

Helminthosporium Phomatae Dearness & House, sp. nov.

Hyphae densely fasciculate, septate, septa 20–30 μ apart, subflexuous, dark brown, 30–180 x 6–7 μ. Conidia subcylindric to oblong-clavate, truncate at one end, often at both ends, one to three septate, usually slightly curved, sometimes quite straight, pale brown throughout, 27–45 x 6–9 μ.

Strictly parasitic on some immature sphaeropsidale, 90–150 μ in diameter, showing an occasional macrophomoid or diplodinoid conidium 20 x 10 μ; on bark of Acer pennsylvanicum L., Catskill mountains. *C. H. Peck* (date of collection not indicated).

The conidia are distinctly different from those of Helminthosporium episphaericum C. & P., occurring on "some effete Diatrype," which proves on careful examination to be Melogramma Bulliardi Tul. The conidia of H. Phomatae are smaller, more uniformly colored and lack the characteristic thickening of the second and third cells which occurs in H. episphaericum.

Cercospora avicularis Winter

On leaves of Polygonum aviculare L., Monroe, Orange county. *C. H. Peck,* July (year of collection not indicated).

Cercospora caricina Ell. & Dearn.

Newcomb, Essex county, on leaves of Carex arctata Boott. *H. D. House,* July 21, 1922. Also collected by Doctor Peck at North Elba on Carex lacustris Willd. Superficially hard to distinguish from Cercospora microstigma Sacc., but there are marked differences in the spores.

Cercospora Cypripedii Ell. & Dearn.

Newcomb, Essex county, on living and languishing leaves of Cypripedium reginae Walt. *H. D. House,* August 4, 1921.

Cercospora elongata Peck

On living and languishing leaves of Dipsacus sylvestris L. near Oneida in Oneida county. *H. D. House,* September 16, 1923. The type was collecteed by Doctor Peck at Jamesville, Onondaga county.

Cercospora Gentianae Peck

Newcomb, Essex county, on living and languishing leaves of Gentiana linearis Froel. *H. D. House,* August 4, 1921. The largest spores in this material are up to 90 μ in length, and exceed the measurements given by Doctor Peck.

Cercospora omphacodes E. & H.

On living and languishing leaves of Phlox divaricata L. Oneida, Oneida county. *H. D. House,* May 15, 1920, and near Henderson Harbor, June 7, 1923.

Acrothecium melanoplus (Schw.) Sacc.

On leaves of Allium canadense L., in fields and woods near Rensselaer. *H. D. House,* May 27, 1921. The fungus attacks the leaves usually near or below the middle, sometimes higher up. The leaf soon dies at the point of attack and the terminal portion falls over and shrivels up. Subsequently the fungus invades practically the entire leaf.

Macrosporium Martindalei Ell. & Mart.

Oneida, Madison county, on dead shoots of Liriodendron Tulipifera L., associated with Myxosporium Liriodendri Dearness & House, and a Vermicularia. *H. D. House,* June 24, 1922. Macrosporium Martindalei was described on the leaves of Magnolia glauca L. as having spores 35–50 x 18–22 μ. The spores here are narrower, the widest ones scarcely 18 μ, but otherwise agreeing with the description by Ellis and Martin.

Didymobotryum corticalis (Cooke & Peck) Dearness & House, comb. nov.

Periconia corticalis Cooke & Peck. N. Y. State Mus. Rep't 29: 52. 1878
Sporocybe corticalis Sacc. Syll. 4: 604. 1886

Near Lake Colden, Adirondack mountains, Essex county, on bark of Thuja occidentalis L. *C. H. Peck,* 1875 (type). On decorticated wood of Pinus sp. Lake Pleasant, Hamilton county. *C. H. Peck.*

The spores in the type are about 8 x 2.75 μ, most of them are continuous; some are continuous and nucleate, some are septate, and some are septate and nucleate. The application of the rule of septation, regarding the septate spores as the more mature, would place this in the genus Didymobotryum.

Tubercularia Ailanthi Cooke

On dead branches of Ailanthus altissima (Mill.) Swingle (A. glandulosus Desf.), Albany. *H. D. House,* May 4, 1923.

Hymenula Phytolaccae Berk.

Bethlehem, Albany county, on dead stems of Phytolacca americana L. *C. H. Peck,* October (year of collection not indicated, and no notice of it appears in Doctor Peck's notebooks).

A CONVENIENT LABORATORY PLANT PRESS[1]

BY

H. S. JACKSON

The drying of plants is at best a laborious and uninteresting, though very necessary, phase of the making of an herbarium and in the preservation of plants for illustrative or class study purposes. The old system of changing dryers has, in large part, given way in recent years to more modern and timesaving methods. The introduction of the use of[2] corrugated strawboard between the dryers and the utilization of some source of artificial heat for drying the plants has taken much of the drudgery from the old methods and in general has resulted in a better quality of herbarium material.

The writer has used a simple type of plant press during the past 12 years which has proven very practical and satisfactory for general laboratory purposes. On account of the simplicity of construction and the low initial cost of this apparatus, it has seemed desirable to furnish a description of it with specifications and illustrations for the benefit of those who may not have solved the problem of drying plants to their satisfaction.

The first press of the sort to be described was constructed in 1911 for use in the laboratories of the department of botany and plant pathology at the Oregon Agriculture College. From one to four of them have been in constant use there since that time both for general laboratory purposes and for use in connection with classes in taxonomic botany. The writer has also used since 1915 presses of similar construction in the botanical department of the Purdue Agricultural Experiment Station. A number of persons[3] from other institutions who have seen these presses in use at one or the other of these places have adopted a similar type.

The apparatus consists essentially of a box with rack on which the plant press rests, provided below with a source of heat (figure 2). The box is 15 by 18½ inches, inside measurement, and is open at

[1] Reprinted with minor changes from the Proceedings of the Indiana Academy of Science, 1920: 183–86. 1921.

[2] Ricker, P. L. Directions for Collecting Plants. Bureau of Plant Industry, U. S. Dep't of Agriculture Circ. 126 : 27–35. 1913.

[3] A plant press constructed according to the plans furnished by Doctor Jackson was installed in the State Botanist's office early in 1921, and has proven to be of great value not only as a timesaver, but also in its capacity for drying larger quantities of plants than could be handled by the old method of changing dryers every day. The specimens are uniformly better than those secured by any other method of drying heretofore tested in this office.

top and bottom. It may be made square 18½ by 18½ inches if desired. The sides are made of one-inch boards, 10 inches wide and fastened together with screws. A rack on which the press rests (figure 3) is provided, and placed 3 inches from the top of the box.[4] This is made of material 1 inch square and is fastened all the way around inside of the box with screws. One or two crosspieces are added as illustrated, though they are perhaps unnecessary. Yellow poplar lumber is found to be very satisfactory as it is not so liable to warp as some other kinds.

Heat may be conveniently supplied by two or three carbon filament electric light bulbs, the sockets for which are fastened about 3 inches from the bottom. Two 16-candle power lights are sufficient for ordinary purposes, dependent somewhat upon the succulence of the plants to be dried. It is well, however, to provide three sockets placed in such a way as to give the most uniform distribution of heat. The writer has also used with entire satisfaction special heating units of low resistance so constructed as to fit in any standard electric light socket. Any convenient method of supplying heat by electric current may be used. It is important, however, that only a small amount of heat be supplied.[5] It is only necessary that a draft of warm air pass through the corrugated boards of the press. Three one-inch auger holes 2 inches from the bottom are provided on each side of the box to allow for intake of air.

The sides of the press are made of one-inch boards 12½ by 18 inches. It is best to fasten a piece 1½ inches wide crosswise at either end to prevent warping. This should be tongued and grooved and glued. Canvas straps with friction buckles are permanently fastened to the boards at either end as shown in the illustration. These should be of such length as to allow for the maximum expansion which the width of the box permits with sufficient additional length to conveniently allow for drawing the press tight. If desired, ordinary woven fabric or leather trunk straps may be used, either loose or nailed to one side of the press. It is important, however,

[4] In the press used by the State Botanist's office this rack is placed only 2 inches from the top of the box which permits the straps on the plant press to be placed correspondingly nearer the sides than is indicated in figure 2. Heat is supplied by two 32-candle power carbon filament electric light bulbs, placed at opposite ends of the box, one slightly to the right of the middle, the other slightly to the left of the middle.

[5] To learn what, if any, danger from fire existed in this press, the one at Albany was tested. The use of three 32-candle power lights caused the bottom of the press to become scorched but it would not ignite. With only two candles in operation both paper and cloth in direct contact with the bulbs ignited within a few minutes, especially when the top of the box was closed by the plant press. If resting upon asbestos board and if nothing comes in contact with the bulbs, the press appears to possess no fire hazard.

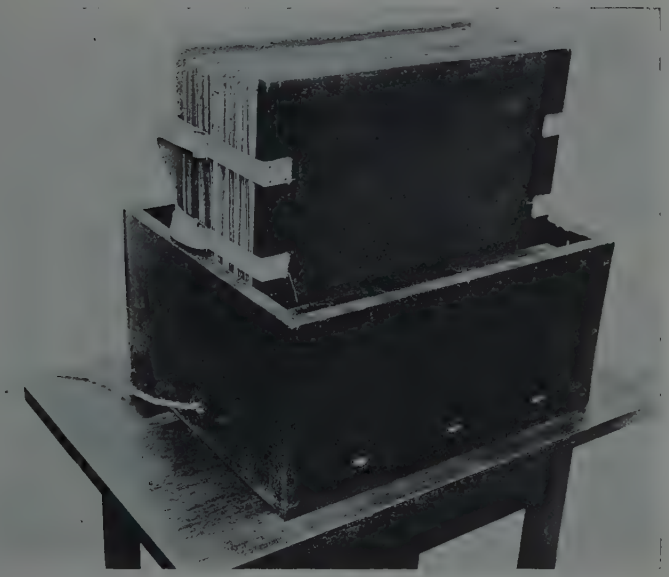

Figure 2 THE PLANT PRESS IN USE

Double-faced corrugated cardboards, cut so that the corrugations extend the short way, are used between dryers. Heat is supplied by two or three carbon filament electric light bulbs, or by special heating units constructed to fit an ordinary electric light socket.

Any thickness of press, within the limits of the width of the box, can be used. Boards 1½ or 3 inches wide are provided to fill in the space at the sides of the press on the rack when only a small amount of material is to be dried.

Ventilation is provided by six one-inch auger holes placed three on each side of the box, 2 inches from the bottom.

(*Photo by M. W. Gardner*)

Figure 3 BOX RAISED ON EDGE TO SHOW CONSTRUCTION

The inside dimensions of the box are 18½ x 15 inches. The sides are 10 inches high, open at the top and bottom. Sockets for electric lights are placed 3 inches from the bottom and the rack upon which the press rests is 3 inches from the top.

The press is made from one-inch boards, 12½ x 18 inches. Canvas straps with friction buckles are provided at either end as illustrated.

Note the loose boards which are used for a floor at sides of press when only a small quantity of material is being dried.

(*Photo by M. W. Gardner*)

that they be placed lengthwise of the press. If they are placed around the short way of the press it will not be possible to fit the loose boards, mentioned below, closely at the sides and heat will be lost. Doublefaced corrugated strawboards are cut so that the corrugations run the short way (crossways) and are used between the dryers. When succulent material is to be dried it is perhaps preferable to use one corrugated board between each pair of dryers. For the ordinary type of material two plant sheets with three dryers between each pair of corrugated boards is found entirely satisfactory. Grasses and other similar plants will be found to dry satisfactorily when three specimens and four dryers are placed between the corrugated boards. Folded sheets of newspaper are found to be entirely satisfactory for use as plant sheets, though the special sheets for sale by all dealers in herbarium supplies are preferred by many collectors. When plants are being dried for illustrative purposes a layer of sheet cotton may be used to advantage between the specimen sheets and the dryers.

When only a few plants are to be dried and the press is thin, a floor of loose but closely fitting boards should be laid on each side of the press on the rack so that all of the heat will be forced through the corrugated boards. For this purpose four boards 18 inches long, two of which are 1½ inches, and two 3 inches wide, should be kept conveniently at hand.

Most material will dry in this press in less than 24 hours although very succulent plants will require a longer time. Attempts to hasten the drying of succulent material by the application of more heat may only serve to either scorch the plant press or spoil the specimens. If one plant dryer is not capable of handling the collections desired, a second one should be added, or more as are needed. If the plant press is turned over every few hours during the early part of the drying period the plants will dry in a shorter time. As the plants become dry considerable shrinkage occurs and it is desirable to tighten the straps once or twice.

Where large quantities of plants are being dried at one time the apparatus described may not prove as satisfactory as some other methods in use, although a battery of four or five such presses will be found to be ample for ordinary class work. For the laboratory or herbarium which has only occasional use for a plant press, or for the individual collector, to whom time is valuable, it will, we believe, be found quite satisfactory. It should also be useful in high schools and vocational schools.

THE RARE PLANTS OF BERGEN SWAMP

BY

M. S. BAXTER AND H. D. HOUSE

The region known as Bergen swamp covers several hundred acres in the townships of Bergen and Byron in the northwest corner of Genesee county. It is drained by Black creek which flows eastward and empties into the Genesee river near Chili. That particular portion of the swamp which has been famous among botanists for more than three-quarters of a century is located about 4 miles west of Bergen, and near the Bergen and Byron township line, and a few rods north of the West Shore railroad at this point. It consists of an irregular open marl bog partially surrounded by a dense cedar swamp.

In dry weather the surface of the marl bog (figure 4) becomes desiccated and apparently contains little moisture, but in wet weather it is soft and miry, but never dangerous to walk upon. Few other places in New York exhibit similar ecological conditions, and probably none upon such a large scale and with such a large array of plants, which owing to the peculiar ecological conditions necessary for their growth, are for the most part extremely rare elsewhere in the State. Some of them, indeed, are found nowhere else.

Among the earlier botanists who explored this swamp are C. M. Booth, G. T. Fish, George W. Clinton, J. H. Paine jr, S. M. Bradley and Charles H. Peck. Later botanists in large numbers have added many species to the known vegetation of this unique swamp. Apparently the only species observed here by the earlier botanists which has never been found elsewhere in the State is Houghton's goldenrod (Solidago Houghtoni Torrey & Gray), although several other species, formerly found also in similar but smaller swamps eastward to Syracuse, are probably now to be found only in Bergen swamp.

The gradual disappearance of certain wild plants from our flora in many cases can not perhaps be avoided owing to the exigencies of settlement and civilization. The famous "Lodi swamp" on the outskirts of Syracuse which formerly contained a number of the rare plants now found in Bergen swamp, has entirely disappeared. Other swamps of this nature have been either drained or subjected to conditions which have altered the nature of the vegetation. It is sincerely to be hoped that some way may be found to preserve Bergen swamp as a wild life refuge, for not only is the swamp the

home of many rare and beautiful plants, but also the home of a large number of beneficial birds and harmless quadrupeds, and other interesting forms of wild life.

To botanists, of course, the peculiar interest in the swamp lies mainly in the abundance here of a large number of plants which occur so sparingly in other portions of the State.

Paine, in his Catalogue of the Plants of Oneida County (which was actually a flora of most of the State north of the lower Hudson valley) records the following species from Bergen swamp:

Aira caespitosa L.
Arethusa bulbosa L.
Carex Buxbaumii Wahl.
Carex Crawei Dewey
Carex eburnea Boott.
Carex gynocrates Wormsk.
Carex Oederi Ehrh.
Carex prairea Dewey.
Carex sterilis Willd.
Carex vaginata Tausch
Calopogon pulchellus R. Br.
Calypso borealis Salisb. (C. M. Booth)
Comandra umbellata Nutt.
Cypripedium candidum Muhl.
Eleocharis rostellata Torrey
Galium boreale L.
Juncus balticus Willd.
Juncus acuminatus Michx.
Juniperus sabina var. prostrata Pers.
Liparis Loesellii Rich.
Microstylis monophyllos Lindl.
Myrica cerifera L. (now known as M. carolinensis Miller)
Phragmitis communis Trin.
Potentilla fruticosa L.
Rynchospora capillacea Torrey
Salix candida Willd.
Scirpus caespitosus L.
Scirpus pauciflorus Lightf.
Scirpus Torreyi Olney.
Senecio balsamitae T. & G.
Solidago Houghtonii T. & G.
Solidago ohioensis Riddell
Tofieldia glutinosa Willd.
Triglochin maritimum L.
Triglochin palustre L.
Triticum caninum L.
Valeriana sylvatica Banks.
Zygadenus glutinosa Nutt.

As far as the present writers are aware the only species in the above impressive list which has not been recently collected there are Calypso borealis and Scirpus Torreyi. It is true that considerable lumbering has occurred in the surrounding woods, but that has seemingly caused little harm to the plants of the open marly bog sections and the rare plants found there seem to

Figure 4 One of the marly bog areas in the center of Bergen swamp, showing the general habitat of Cypripedium candidum, Arethusa bulbosa, Comandra umbellata, Parnassia caroliniana, Scirpus cespitosus, Trianthera glutinosa, Solidago houghtonii, Anticlea elegans, Myrica caro-

be in no immediate danger of extermination. Any proposed attempt to drain the swamp or its surrounding swampy forest, however, would forever obliterate what is at the present time one of the most unique swamps in the State, and one which should be preserved and protected not alone for the scientific interest which attaches to its vegetation but also as a refuge for a large and varied fauna of bird life. The preservation of such areas as bird refuges is highly economic because of the beneficial habits to agriculture of the birds which find such an area suitable for their nesting and food requirements.

It was at first the intention of the writers to add to this account a list of the plants now known to occur within the region known as Bergen swamp. It seems, however, that such a list should be correlated with an ecological study of the region, which at this time can not be made, and our account of the vegetation of the swamp may be limited merely to the listing of some of the less common plants or plants of peculiar interest, not noted in Paine's flora of Oneida county:

Dryopteris cristata (L.) A. Gray
Dryopteris Clintoniana (D. C. Eaton) Dowell
Dryopteris Goldiana (Hook.) A. Gray
Phegopteris Dryopteris (L.) Fee
Equisetum fluviatile L.
Lycopodium lucidulum Michx.
Lycopodium obscurum L.
Picea mariana (Mill.) B. S. P.
Taxus canadensis Marsh.
Scheuchzeria palustris L.
Panicum Lindheimeri Nash
Trisetum pennsylvanicum (L.) Beauv.
Eleocharis acuminata (Muhl.) Nees
Rynchospora alba (L.) Vahl
Mariscus mariscoides (Muhl.) Kuntze
Carex rosea Schk.
Carex trisperma Dewey
Carex bromoides Schk.
Carex cephalantha (Bailey) Bickn.
Carex incomperta Bickn.
Carex Bebbii Olney
Carex cristatella Britton
Carex leptalea Wahl.
Carex pedunculata Muhl.
Carex aurea Nutt.
Carex anceps Muhl.
Carex Shriveri Britton
Carex lacustris Willd.
Carex flava L.
Carex pseudocyperus L.
Calla palustris L.
Juncus Dudleyi Wiegand
Juncus brachycephalus (Engelm.) Buch.
Clintonia borealis (Ait.) Raf.
Vagnera trifolia (L.) Morong

Cypripedium reginae Walt.
Cypripedium parviflorum Salisb.
Cypripedium acaule Ait.
Coeloglossum bracteatum (Willd.) Parl.
Limnorchis dilatata (Pursh) Rydb.
Lysias orbiculata (Pursh) Rydb.
Blephariglottis Blephariglottis (Willd.) Rydb.
Pogonia ophioglossoides (L.) Ker.
Ophrys cordata L.
Peramium pubescens (Willd.) MacM.
Alsine longifolia (Muhl.) Britton
Neobeckia aquatica (Eaton) Britton
Sarracenia purpurea L.
Drosera rotundifolia L.
Parnassia caroliniana Michx.
Saxifraga pennsylvanica L.
Mitella nuda L.
Dalibarda repens L.
Rhus Vernix L.
Acer spicatum Lam.
Rhamnus alnifolia L'Her.
Hypericum boreale (Britton) Bicknell
Pyrola chlorantha Sw.
Pyrola uliginosa Torrey
Pyrola secunda L.
Lonicera oblongifolia (Goldie) Hooker
Lobelia Kalmii L.
Viola nephrophylla Greene?
Solidago uliginosa Nutt.
Solidago ulmifolia Muhl.
Solidago uniligulata (DC.) Porter
Aster junceus Ait.

GENERAL NOTES

Additional Myxomycetes from the Cayuga Lake Basin

Since the appearance of the Preliminary list of Myxomycetes of the Cayuga lake basin,[1] numerous gatherings of specimens have been made and studied, as a result of which the following species are added to the list already known to occur in this region. Specimens are preserved in the collections of the writers.

Badhamia lilacina (Fries) Rost.

Growing in considerable masses on mosses in Woodwardia swamp near Freeville, Cortland county, July 23, 1922. Collected by *Wann and Muenscher.*

Cribraria languescens Rex

On decayed wood, in Cascadilla gorge, Ithaca, Tompkins county, July 8, 1922. Collected by *F. B. Wann.*

Physarum connatum Lister

On bark of decaying Populus grandidentata Michx., Coy Glen, Ithaca, Tompkins county, December 5, 1922. Collected by *Wann and Muenscher.*

Physarum gyrosum Rost.

On leaves of cucumber vines, Forest Home, Ithaca, Tompkins county, July 1922. Collected by *F. Dickson.*

Physarum lateritium Morgan

Aurora, Cayuga county, July 21, 1923. Collected by *F. B. Wann.*

F. B. Wann and W. C. Muenscher
New York State College of Agriculture, Ithaca, N. Y.

Rhododendron maximum L. in Genesee County

An area of about 3 acres in the Oak Orchard swamp, Genesee county, contains many fine specimens about 10 feet high. The exact location is almost on the Alabama and Oakfield town line,

[1] Wann, F. B. & Muenscher, W. C. Mycologia 14: 38–41. 1922.

about a mile south of the Orleans county line. Collected in flower, July 22, 1917 (no. 5890) in the herbarium of Cornell University.

W. C. MUENSCHER
New York State College of Agriculture, Ithaca, N. Y.

Polyporus delectans Peck, at Ithaca

A fine large specimen of this species was gathered from the end of a sawed-off elm log, Inlet flats, at the head of Cayuga lake, November 9, 1919. The specimens collected by the writer are in the herbarium of C. G. Lloyd, who makes the determination.

W. C. MUENSCHER
New York State College of Agriculture, Ithaca, N. Y.

A Sequoia far from Its Home

While on a collecting trip along the eastern side of Cayuga lake, in central New York, my attention was called to an unusual appearing tree standing in an open field. A closer examination proved it to be a California big tree, Sequoia gigantea. Since this species is generally considered not hardy north of Philadelphia, I think a few brief notes on its occurrence here might be of interest.

The tree stands in an open field on "Dunkirk stony clay" soil, near the edge of the village of Aurora. The exact location is about 200 yards from the edge of Cayuga lake on a gentle slope that is exposed to the cold winds from the lake. The nearest other tree is a huge white oak, Quercus alba, which stands about 100 feet east of the Sequoia.

The Sequoia tree is at least 60 feet high and the base of its tapering trunk is 4 feet in diameter. The lower branches have been cut off for a distance of over 30 feet up the trunk. The upper branches are in good condition and are covered with dark green leaves. With the aid of field glasses, numerous well-developed cones were observed in the top of the tree. None of the cones that were picked up on the ground beneath the tree contained fertile seeds. The cones on the tree were inaccessible so they could not be examined for seeds.

According to statements by the present owner of the land, the tree was brought from California by an old sea captain between 1820 and 1830. In 1850 this property was purchased by the father of the present owner who was much interested in trees and took special care of this Sequoia. The soil around this tree was not plowed but it was frequently fertilized with manure. The tree has always been hardy and never suffered from cold winters until the

severe winter of 1917–18, when most of the lower branches were removed. Before this the lower branches reached almost to the ground.

It appears that the Sequoia can not be grown successfully in the northeastern United States. It has not proved hardy in New York City nor around Boston. Even trees that thrived for a number of years in Rochester were killed in the severe winter of 1917–18. It may be possible that there exists in the particular locality in which the Aurora tree is growing, a combination of soil and climate more favorable than in the other localities where the Sequoia has been unsuccessfully grown.

W. C. Muenscher
New York State College of Agriculture, Ithaca, N. Y.

Additions to the Flora of the Lake George Region

1 **Bromus tectorum** L. Along the state road, south of Whitehall, near the Barge canal locks at Comstock, this recently introduced grass was becoming common, June 20, 1920.

2 **Panicum calliphyllum** Ashe. A few plants of this grass were discovered on July 7, 1918, on the thin rocky slopes of Peaked mountain. The type locality for the species is Watkins Glen, and according to Mrs Agnes Chase, this is the second station for it in this State.

3 **Panicum philadelphicum** Bernh. Specimens of this grass, related to the common Panicum capillare, were collected on September 15, 1918, in a sandy hilltop field, south of West Fort Ann, and determined by Mrs Chase.

4 **Hippuris vulgaris** L. This rather uncommon water plant was discovered by Frank Dobbin on August 21, 1921, in the Battenkill river at Shushan.

5 **Chimaphila maculata** (L.) Pursh. Three small plants, not in flower, were discovered north of Hudson Falls, July 29, 1915. The upper midrib of each leaf was variegated with white. I suspect that this is the northernmost station for the spotted wintergreen in the Hudson valley, where it is replaced almost entirely by the common Prince's pine, Chimaphila umbellata. I have no other record of its growing in the Lake George region, and I have never collected it in the vicinity of Albany.

6 **Silene dichotoma** Ehrh. Plants of this recently introduced species were first found in a newly seeded meadow near Vaughns, north of Hudson Falls, June 30, 1913. It was afterward found in

a meadow southwest of Tripoli, and June 25, 1920, several plants in the sandy, gravelly field north of Tripoli cemetery. Frank Dobbin found it in a meadow at Shushan, July 14, 1920, suspecting it to be introduced with grass seed bought in Chicago.

7 **Amelanchier Bartramiana** (Tausch) Roem. Found by Frank Dobbin in Rich's swamp, southwest of Shushan, in flower on May 7, 1916, and additional numbers found deeper in the same swamp on May 27, 1917.

S. H. Burnham
New York State College of Agriculture, Ithaca, N. Y.

INDEX

Acrospermum cuneolum, 67
Acrothecium melanoplus, 98
Additions to flora of Lake George region, 109
Additions to the herbarium, 8
Aecidium Dicentrae, 41
Agropyron tenerum, 25
Ajuga repens, 13
Albugo tragopogonis, 59
Alnus viridis var. Fernaldii, 17
Alsine aquatica, 36
Amelanchier amabilis, 12
  Bartramiana, 110
Amphisphaeria applanata, 71
  thujina, 71
Andromeda glaucophylla, 38
Andropogon scoparius, 19
Antennaria Parlinii, 21
Anthostoma amplispora, 77
  cercidicolum, 78
Arctostaphylos uva-ursi, 38
Arisaema Stewardsonii, 22
Asarum acuminatum, 21, 27
Asclepias exaltata, 38
Ascochyta Rhei, 87
Ascomycetes, 59
Aster Blakei, 17
  novi-belgi, 17
Asterina Killipii, 68
Azalea viscosa, 13

Badhamia lilacina, 107
  utricularis, 58
Balansia Hypoxylon, 69
Baxter, M. S. and House, H. D., The rare plants of Bergen swamp, 103
Belonidium Spiraeae, 60
Beloniella brevipila, 61
Bergen swamp, rare plants of, 103
Betula coerulea, 17
Bidens trichosperma, 25
Black river, plants collected along, 19
Blephariglottis Blephariglottis, 35
Bonaventure, Que., plants from, 9
Botrychium angustisegmentum, 22
Botrydiplodia Celastri, 87
Bromus inermis, 32
  tectorum, 109
Bullaria Hieracii, 41
Burnham, S. H., Additions to the flora of the Lake George region, 109

Calamagrostis inexpansa, 19
  Porteri, 26
Calosphaeria, 41
Campanula uliginosa, 39
Carex Asa-Grayi, 33
  aurea, 12
  cryptolepis var. prolifera, 26
  incomperta, 34
  Frankii, 22
  laeviaginata, 33
  leucorum, 33
  Merritt-Fernaldii, 27
  oligosperma, 33
  Peckii, 20
  rosaeoides, 34
  silacea, 26
  Sprengelii, 19
  tonsa, 33
Castilleja coccinea, 23
Catinula turgida, 92
Cenangium Cephalanthi, 62
  griseum, 62
Cenchrus pauciflorus, 34
Cephalozia macrostachya, 26
  planiceps, 19
Cephaloziella Hampeana, 19
Cercospora avicularis, 97
  caricina, 97
  Cypripedii, 97
  elongata, 97
  Gentianae, 97
  omphacodes, 97

Chimaphila maculata, 109
Chiogenes hispidula, 38
Ciboria firma, 59
Cintractia subinclusa, 41
Circinostoma, 41
Cirsium odoratum, 40
Cladosporium herbarum, 96
Clavaria amethystina, 42
aurantio-cinnabarina, 42
Claviceps purpurea, 69
Clintonia borealis f. albicarpa, 34
Coccomyces comitialis, 65
coronatus, 65
tumidus, 66
Comptonia peregrina, 35
Contributions to state herbarium, 7
Convolvulus spithamaeus, 38
Cordyceps agariciformis, 42
militaris, 42
Corticium investiens, 42
tessulatum, 42
vellereum, 42
Corylus cornuta, 13
Coryneum Cydonae, 93
Crataegus macrantha, 37
Cribraria languescens, 107
Cucurbitaria Comptoniae, 71
Cylindrosporium fraxinicolum, 92
Cyperus diandrus, 34
Cypripedium arietinum, 15, 35

Dearness, John, and House, H. D., New or noteworthy species of fungi, 57
Dendrophoma Azaleae, 84
Populi, 65
Diaporthe acerina, 78
aorista, 79
Arctii, 79
disciformis, 79
impulsa, 80
megalospora, 80
menispermoides, 80
obscura, 80
phomaspora, 80
spicata, 80
tessera, 81
Diatrype platystoma, 76
Diatrypella decorata, 77
discoidea, 77
quercina, 77
Dicaeoma Acetosae, 43
asterum, 43
Clematidis, 43
Eatoniae, 43
McClatchianum, 43
Majanthae, 43
orbicula, 44
Peckii, 44
Violae, 44
Dictydiaethalium plumbeum, 59
Didymobotryum corticalis, 98
Didymium melanospermum var. minus, 58
Dimerosporium balsamicola, 67
Diplodia Linderae, 87
Diplosporium flavidum, 94
Polypori, 95
Doellingeria infirma, 13
Dothidella caricina, 69
Dracocephalum virginicum, 24
Draparnallia acuta, 26
Dryopteris simulata, 30
Durella minutissima, 61

Echinochloa Crusgalli var. Michauxii, 32
Eleocharis olivacea, 15
Ellisiella candata, 96
Elymus virginicus var. hirsutiglumis, 32
Empusa americana, 46
Equisetum laevigatum, 31
Eragrostis Frankii, 33
Eriophorum callithrix, 21, 33
Exoascus Farlowii, 59

Flora of Lake George region, additions, 109
Fraxinus Michauxii, 12
Frullania Selwyniana, 14
Fungi, new or noteworthy species, 57; notes on, 41

General notes, 107
Geranium Bicknellii, 15
carolinianum, 17
Glomerella cingulata, 72
Gnaphalium Macounii, 15, 39
Gnonomia setacea var. Caryae, 76
Godronia Cephalanti, 62
Nemopanthis, 63

Grandinia sulphurella, 44
Guignardia caricis, 73
depressa, 73
Pleurothallis, 72
smilacinae, 73
Gymnosporangium germinale, 44

Helenium latifolium, 39
Helicia, 91
buccina, 91
Heliopsis scabra, 13
Helminthosporium macrocarpon, 96
naviculatum, 96
Phomatae, 96
Hendersonia Viburni, 87
Heterosphaeria Linariae, 64
Hippuris vulgaris, 109
Holwaya gigantea, 64
House, Homer D., Notes on Fungi, 41; vegetation of the eastern end of Oneida lake, 28; local Flora notes, 11
Hymenochaete arida, 44
badio-ferruginea, 44
episphaeria, 44
tenuis, 45
Hymenula Phytolaccae, 98
Hypocrea latizonata, 45
Hypoderma brachyspora, 66
rufilabrum, 66
strobicola, 66
Hypomyces aurantius, 45
Hypomycetes, 94
Hysterium thujarum, 45

Ibidium platagineum, 35
Identifications, 9

Jackson, H. S. A convenient laboratory plant press, 99
Juncus articulatus var. stolonifer, 34
marginatus, 34

Kalmia latifolia, 37
Polifolia, 38
Kuehneola Uredinis, 45

Laboratory plant press, 99
Lachnea setosa, 45
Lake George region, additions to flora of, 109
Larix laricina, 30
Lasiosphaeria xestothele, 70
Lectures, 9
Leocarpus fragilis, 59
Leotia marcida, 45
Leptostroma Allii, 90
Leptosphaeria borealis var. Populi, 74
culmifraga, 75
dumetorum, 75
Leptostromella Andropogonis, 91
Angelicae, 91
septorioides, 91
Leptothyrella Aceris, 90
Lichens, from Newcomb, Essex county, 14
Linum catharticum, 23
Lobelia Kalmii, 39
Local flora notes, IX. 11
Long lake, plants collected, 18
Lophodermium Abietis, 65
brachysporum, 66
Oxycocci var. hypophyllum, 65
sphaerioides, 66
tumidum, 66
Lower Jay, plants collected, 16
Lycopodium clavatum var. megastachyon, 31

Macrophoma dryina, 83
Pernettyae, 83
Macroplodia Clematidis, 85
Ellisii, 85
juglandicola, 86
phomatella, 86
Sabina, 45
simillima, 86
Wilsonii, 87
Macrosporium Martindalei, 98
Marssonina Violae, 93
Massaria conspurcata, 76
Melachroia xanthomela, 59
Melampsora americana, 46
Melampsorella elatina, 47
Melampsoropsis abietina, 46
Cassandrae, 46
Chiogenes, 46
ledicola, 46
Melanconiella nigrospora, 81
Meschuttii, 81
subviridis, 81
Melanconis modonia, 81

Melanconium bètulinum, 93
parvulum, 93
subviridis, 81
Typhae, 93
Meliola Cookeana, 67
Mentha canadensis var. glabrata, 24
piperita, 38
Merulius corium, 47
ochraceus, 47
Metasphaeria aulica, 74
leiostega, 74
microecia, 74
Metzgeria pubescens, 19
Microdiplodia Linderae, 87
Micropeltis Viburni, 68
Micropuccinia conglomerata, 47
mesomajalis, 47
porphyrogenita, 47
recedeus, 48
Mimulus Moschantus, 23
Monochaeta Syringae, 48
Muenscher, W. C., Rhododendron maximum in Genesee county, 107; Polyporus delectans, at Ithaca, 108; A Sequoia far from its home, 108
Mycosphaerella conigena, 73
Pontederiae, 73
punctiformis, 74
verbascicola, 74
Myxogastrales, 58
Myxomycetes, of the Cayuga lake basin, 9; additional, 107
Myxosporium Liriodendri, 92

Nectria episphaeria var. minor, 69
Nemania, 48
New or noteworthy species of fungi, 57
Nigredo Lilii, 48
Scirpi, 49
seditiosa, 49
Silphii, 49
Notes on fungi IX, 41
Nummularia, 49, 78
Numulariola, 49

Ombrophila selulata, 60
Oneida lake, vegetation of eastern end, 28
Ophiobolus filisporus, 75
Ophioglossum vulgatum, 30
Oryzopsis asperifolia, 32
pungens, 32
Ostropa mellea, 67
Otthia staphylina, 71
Otthiella staphylina, 71

Panicum aculeatum, 32
calliphyllum, 109
latifolium, 17
philadelphicum, 109
Scribnerianum, 25
spretum, 19
Tuckermani, 32
xanthophysum, 32
Patellaria nigrovirens, 61
Patellina caesia, 50
Peck, Doctor, field notes, 5
Peniophora mutata, 50
velutina, 50
Penstemon pallidus, 27
Peramium tesellatum, 35
Pestalozzia funerea, 94
Gaultheriae, 94
Pezicula cinnamomea, 63
Peziza clypeata, 50
Pezizella Lathyri, 60
Phacidum Populi, 64
Phallus rubicundus, 50
Phoma glandicola, 84
melaena, 84
nervisequa, 84
Phorcys Xanthoxyli, 50
Phragmidium americanum, 51
Phragmitis Phragmitis, 15
Phycomycetes, 59
Phyllachora Dalibardae, 51
Melicae, 70
Oryzopsidis, 70
Wittrockii, 51
Phyllosticta Cyanococci, 82
limitata, 82
minutissima, 83
Syriaca, 83
Physalacria inflata, 51
Physarum connatum, 107
gyrosum, 107
lateritium, 107
Picea rubens, 30
Pinus resinosa, 24
Placosphaeria Baccharidis, 85
Plant press, laboratory, 99

Plants, rare plants of Bergen swamp, 103; collected along Black river below Watertown, 19; collected at Lower Jay, Essex County, 16; collected on Long Lake, 18; from Bonaventure, Quebec, 9
Pleospora herbarum, 75
var. Triglochinis, 75
scabra, 75
vagans, 76
Plowrightia staphylina, 71
Poa saltuensis, 20
Polemonium VanBruntiae, 21
Polygala polygama, 17, 37
Polyporus delectans, at Ithaca, 108
Populus alba, 36
candicans, 36
Poria barbaeformis, 52
corticola, 52
laevigata, 52
lenis, 52
mucida, 52
nigrescens, 52
papyracea, 52
vitillina, 52
Porothelium subtile, 52
Potamogeton americanus, 31
bupleuroides, 31
praelongus, 20
Potentilla arguta, 37
inclinata, 15
Propolidium fuscocinereum, 64
Prunulus alcaliniformis, 52
Prunus depressa, 19
Pseudographis Phragmitis, 66
Pucciniastrum Agrimoniae, 53
americanum, 53
Pyrenomycetes, 67
Pyrenopeziza compressula, 61
subatra, 61
Pyrola chlorantha, 16

Quercus ilicifolia, 35

Ramularia Chamaenerii, 95
Ranunculi, 95
Ranunculus flabellaris, 12
Rhabdospora continua, 89
Polygoni, 89
Rhododendron maximum, in Genesee county, 107
Ribes cynosbati, 36
hirtellum, 37
Rosa Bicknellii, 26
Bourgeaniana, 16
Bushii, 15
Lyoni, 12, 26
obovata, 12, 24, 27
palustris, 40
serrulata, 12, 16
subblanda, 12
virginiana, 16, 24
Rosellinia ligniaria, 53
Rubus Baileyanus, 21
sativus, 23, 40

Sagittaria rigida, 32
Salix Bebbiana, 36
longifolia, 36
sericea, 36
syrticola, 24
tristis, 36
Saururus cernuus, 20
Saxifraga pennsylvanica, 22
Scheuchzeria palustris, 31
Scientific investigations, 5
Scirpus cyperinus var. pelius, 33
Scopaphoma, 83
Corioli, 84
Sebacina calcea, 53
Sedum purpureum, 36
Septocylindrium aromaticum, 95
melleum, 53
Ranunculi, 95
strobilinum, 53
Septogloeum Apocyni, 94
Septomyxa grisea, 93
Septoria alnicola, 88
alnifolia, 88
aquilegiae, 88
Commonsii, 88
conspicua, 88
gentianoides, 88
maculifera, 89
mollisia, 89
Sii, 89
Septoriopsis leptosperma, 95
Sequoia, far from its home, 108
Serapias Helleborine, 24
Silene dichotoma, 109
Smilax herbacea var. latifolia, 21
hispida, 35

Solidago altissima, 39
graminifolia var. galetorum, 39
patula, 39
Randii, 17
ulmifolia, 13
Solaneum carolinense, 38
Sparganium acaule, 32
chlorocarpum, 24
minimum, 27
Spartina Michauxiana, 19
Sphaerographium niveum, 89
Sphaeronema pallidum, 84
pruniosum, 85
Robiniae, 85
Sphaeropsideae, 82
Sphaeropsis Clematidis, 85
Ellisii, 85
juglandicola, 86
Juniperi, 45
simillima, 86
Spirea tomentosa f. albiflora, 24
Splanchnonema conspurcata, 76
Sporocybe cortialis, 98
Sporoschisma mirabile, 53
Steccherinum adustum, 54
septentrionale, 54
Streptopus amplexicaulis, 34
Strickeria, 54

Taphrina Johansonii, 59
Teichospora, 54
Chevalierii, 72
Telimena Elymi, 54
Thalictrum dasycarpum, 12
venulosum, 15
Thelypteris Goldiana, 22
Thyronextria Xanthoxyli, 69
Trematosphaeria caryophaga, 54
Tremella vesicaria, 55
Trichopeziza myricacea, 60
Trichostema dichotomum, 38
Trifolium arvense, 37
Trollius laxus, 27
Tubercularia Ailanthi, 98
Tympanis Cephalanthi, 63
turbinata, 64
Typha angustifolia, 31
latifolia, 31

Uredinopsis mirabilis, 56
Osmundae, 56
Urocystis Waldsteniae, 56
Ustilago residua, 56
Ustulina, 48

Vaccinium canadense, f. chiococcum, 19
corymbosum var. amoenum, 38
Valsa ceratophora, 77
Valsaria nigrospora, 81
Vegetation of the eastern end of Oneida lake, 28
Verbaseum Lychnitis, f. album, 39
Verbena angustifolia, 25
Vibrissea truncorum, 59
Visitors, 9
Viola Baxteri, 23
Dowelliana, 25
Egglestoniana, 25
egregia, 25
fimbriatula, 25
latiuscula, 25
papilionacea, 37
septentrionalis, 37
vermontana, 25

Wann, F. B. and Muenscher, W. C., Additional Myxomycetes from the Cayuga lake basin, 107
Webera sessilis, 27
Woodsia obtusa, 17

Xylaria Castorea, 82

Zignoella pulviscula, 71